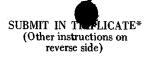
FILE NOTATIONS				•	-
Entered in NID File.		. CA	ected by Cla		
Entered On S R Shoots Location Map Pinned			py Nil Dito F	ide Office	
Gord Indexed INV R for State or Pho-		•	abbanaj rasse Andreas		
COMPLETION					
Chie Welli Chang	itted:		ation impacts	<b>.</b>	
GW 03		-	d'released' Status of Pho	e Lineii .	
Dallier's Ling.	<u></u>	IGS FILED			
Blackric Luggs	No. 1				
<u>.</u>	_ Male	Suit	GFM;	Mil	-

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

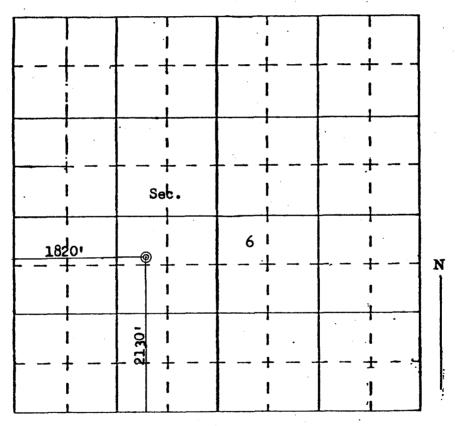


5. Lease Designation and Serial No.

Fee
6. If Indian, Allottee or Tribe Name

la. Type of Work	ביי ביי		DEEDEN!	DI	UC BACK [	7. Unit Agreement Name
b. Type of Well	DRILL 🔯	ű.	DEEPEN	PL	UG BACK 🗌	
Oil X	Gas Well	Other	•	Single X	Multiple Zone	8. Farm or Lease Name
2. Name of Operator						Vega Nelson
Worldwide	Explorat:	ion Consul	tants, Inc.,	c/o K & A,	Inc.	9. Well No.
3. Address of Operat						10. Field and Pool, or Wildcat
2360 Anac	onda Towe:	r. 555-17tl	n. Street, Decordance with any Str	enver, CO 8	30202	
At surface				NE Su		Wildcat 11. Sec., T., R., M., or Blk.
		2,130' FSL	1,820' FWL	WE DW	,	and Survey or Area
At proposed prod.	zone					'Sec. 6, T33S, R24E SLM
14. Distance in mile	s and direction f	rom nearest town	or post office*			12. County or Parrish 13. State
		ticello, U				San Juan Utah
<ol> <li>Distance from p location to near</li> </ol>	est		16.	No. of acres in lea		of acres assigned his well
	drlg. line, if any	510		320	ســـــــــــــــــــــــــــــــــــــ	40
18. Distance from p to nearest well,	drilling, complete	d,	19.	Proposed depth	•	ary or cable tools
or applied for, of	n tais lease, it.			5,900 2000		Rotary
21. Elevations (Show	wnetner Dr, KI		915' GL	`		22. Approx. date work will start*
23.			<del>~ · · · · · · · · · · · · · · · · · · ·</del>	NE CONTRACTOR		
			ROPOSED CASING A	· · · · · · · · · · · · · · · · · · ·		
Size of Hole		of Casing	Weight per Foot	Setting De		Quantity of Cement
14 3/4"		9 <u>5/8"</u> 7"	36	950		To Surface
8 3/4"		/	20 & 23	4900		85 sx
6 1/4"	4	4 1/2"	10.5	5900	•	280 sx
that if i run from	t is not a surface to	necessary o TD. Pre	to run 7" as	intermediat Lequipment	e string,	, as shown above, except 4 1/2" casing will be st of 10" Series 900
						MEASON
AP	PROVED	BY THE [	WINDON			INGUS IN VICES
OF	CIL GAS	, AND MIN	INIC			
						MAY 2 1980
DA	TE: O	· 20 - 8	<u> </u>			
BY	: 24.7	Min	lu_			DIVISION OF
	1.					OIL, GAS & MINING
IN ABOVE SPACE	DESCRIBE PRO	POSED PROCE	M. If proposal is to	doenen or niver bad	ak crivo dete on nu	esent productive zone and proposed new pro-
	oposal is to drill					sured and true vertical depths. Give blowout
24.		2	" •			
Signed	Land	m-	Title	Asst. Oper.	Mgr., K &	A, Inc. Date April 30, 1980
(This space for	Federal or State	ffice use)				•
Permit No. 4	3-037-3	0554		Approval Date	5/20/	80
2 02 mily 210				Tippiovai Date	7 1	
Approved by			Title			Date
Conditions of ap	proval, if any:					
Distribut		.C Orig	. + 2			
	Ope					
	Fil-	e – 1	*See Instructio	ns On Reverse 3	oide	

COMPANY	WORLDWIDE EXPLORATION	CONSULTANTS, INC.
LEASE	VEGA	WELL NO. 1
8EC	6 , T 33S R San Juan County, Utah	
LOCATION	2130'FSL 1820'FWL	
FLEVATIO	N 6915 ungraded ground	



SCALE-4 INCHES EQUALS 1 MILE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTE OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Fred B. Kerr Jr.

Registered Land Surveyor.

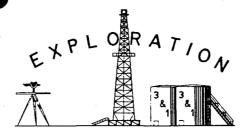
#3950

SURVEYED April 24

FARMINGTON, N. M.

DATE: May 2,	MOUNTAIN STATES RESOURCES, INC
PERATOR: LA	1980 MOUNTAIN STATES RESOURCES, INC.
VELL NO: Ve	Sa #1
ocation: Sec.	6 T. 335 R. 24E County: San Juan
ile Prepared: 🗸	Entered on N.I.D:
Card Indexed:	7 Completion Sheet: [7]
	API Number 43-037-30554
CHECKED BY:	
Petroleum Engi	neer: M.J. Minder 5-20-80 Contin
-	ya g sans
The state of the s	
Director:	
	Aide: <u>Dubmitting</u> and - 5/5/80-0
	Aide: <u>Dubmitting</u> and - 5/5/80 X
Administrative	
Administrative	
Administrative  PPROVAL LETTER:  Bond Required:  Order No.  Rule C-3(c), T	Survey Plat Required:
Administrative  PPROVAL LETTER:  Bond Required:  Order No.  Rule C-3(c), T w  Lease Designat	Survey Plat Required:  O.K. Rule C-3  opographic Exception - company owns or controls acreage ithin a 660' radius of proposed site
Administrative  PPROVAL LETTER:  Bond Required:  Order No.  Rule C-3(c), T w  Lease Designat	Survey Plat Required:  O.K. Rule C-3  Opographic Exception - company owns or controls acreage ithin a 660' radius of proposed site  ion Plotted on Map  Approval Letter Unitten
Administrative  PPROVAL LETTER:  Bond Required:  Order No.  Rule C-3(c), T w  Lease Designat	Survey Plat Required:  O.K. Rule C-3  opographic Exception - company owns or controls acreage ithin a 660' radius of proposed site

## WORLDWIDE



### CONSULTANTS

E. F. Durkee
W. T. Stoeckinger
S. L. Pederson

Suite 3365 Anaconda Tower • 555 17th Street • Denver, Colorado 80202 • Phone 303-892-0333

May 1,4 1980

Division of Oil, Gas and Mining 1588 West North Temple Salt Lake City, Utah 84116

ATTENTION: Ms. Bonnie Melendez

Enclosed please find our Bond No. 146F3733 for the Vega #1 Well, NE SW Section 16, T. 33 S., R. 24 E., San Juan County, Utah.

If further information is needed, please contact our office.

Sincerely,

WORLDWIDE EXPLORATION CONSULTANTS, INC.

Irene G. Baker

ib

Enclosure: Drilling Bond

MAY 1 9 1980

DIVISION OF OIL, GAS & MINING

this lend.)

### STATE OF UTAL PEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

and the second and the second

B O N D Bond No. 146F3733

RNOW ALL MEN BY THESE PRESENTS,

That WE:	Worldwide Explo	oration Consultants Inc.
of	· · · · · · · · · · · · · · · · · · ·	in the description of the second second
County of	Denver	State of: Colorado
as principal	Travelers Inde	emnity Company
payment, will Division of (	penal sum as indicat Land truly be made t Dil, Gas and Mining, Tors, administrators	ness in this State, are held and firmly bound unto the ted, lawful money of the United States, for which to the State of Utah for the use and benefit of the we bind ourselves, and each of us, and each of our or successors, and assigns jointly and severally,
proposes to c	HITT G METT OF METTS	chligation is that whereas the above bounden principals for oil, gas or stratigraphic purposes in and upon sated within the State of Utah, to wit:
Ve	ga #1, NESW Section	on 16, T33S, R24E, San Juan County
Sta	ate of Utah	
	•	
the Division the proper pl State, all no obligation is	of Oil, Cas and Mini ugging of said well tices and records re void; otherwise, th	bove bounder principal shall comply with all of the ate, and the rules and regulations and orders of mg of the State, including, but not limited to, or wells, and filing with said Division of the quired by said office, then this as same shall be and remain in full torce and effect.
*Penal Sum of	Ten Thousand and	no/100 (\$10,000)State of Utah
Witness our h	ands and seals, this	8th <sup>day of</sup> May, 1980
		Worldwide Exploration Consultants, Inc.
	·	Principal
Witness our h	ends and seals, this	8thday of May, 1980
		Aravelers Indemnity Company
		Auc a Carmichan
ATTORNEY GENE	o form and execution FAL	Surety  Jane A. Carmichael Attorney-in-Fact
Date:		
orricers, wit	h the seal of the co	n, the bond should be executed by its duly authorized rporation affixed. When principal or surety executes rney or other, evidence of authority must accompany

\*See reverse side for instructions and bonding requirements

### CERTIFICATION

I, Paul D. Tubach, Assistant Secretary (Surety) of THE TRAVELERS INDEMNIT: COMPANY, certify that the foregoing power of attorney, the above quoted Sections 14. and 16. of Exticle IV of the By-Laws and the Resolution of the Board of Directors of November 30, 1959 have not been abridged or revoked and are now in full force and effect.

Signed and Sealed at Hartford, Connecticut, this

8th day of May

1980



MAY 1 9 1980 sistant Secretary, Sure-y

DIVISION OF OIL, GAS & MINING

S-1869 (BACK)

## The Travelers Indemnity Company Hartford, Connecticut

### POWER OF ATTORNEY

### KNOW ALL MEN BY THESE PRESENTS:

That THE TRAVELERS INDEMNITY COMPANY, a corporation of the State of Connecticut, does hereby make, constitute and appoint

Norman Sterling, Jr., Paul M. Barbour, Norman C. Headrick, David H. Snead, Thomas J. Sisk, Jr., Judith M. Haines, Cortland P. Brown, Jane A. Carmichael. all of Denver, Colorado, EACH

its true and lawful Attorney(s)-in-Fact, with full power and authority, for and on behalf of the Company as surety, to execute and deliver and affix the seal of the Company thereto, if a seal is required, bonds, undertakings, recognizances, consents of surety or other written obligations in the nature thereof, as follows:

Any and all bonds, undertakings, recognizances, consents of surety or other written obligations in the nature thereof not exceeding in amount Two Hundred Thousand Dollars (\$200,000) in any single instance

and to bind THE TRAVELERS INDEMNITY COMPANY thereby, and all of the acts of said Attorney(s)in-Fact, pursuant to these presents, are hereby ratified and confirmed.

This appointment is made under and by authority of the following by-laws of the Company which by-laws are now in full force and effect:

ARTICLE IV, SECTION 14. The Chairman of the Board, the President, the Chairman of the Finance Committee, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Corporate Secretary or any Department Secretary may appoint attorneys-in-fact or agents with power and authority, as defined or limited in their respective powers of attorney, for and on behalf of the Company to execute and deliver, and affix the seal of the Company thereto, bonds, undertakings, recognizances, consents of surety or other written obligations in the nature thereof and any of said officers may remove any such attorney-in-fact or agent and revoke the power and authority given to him.

ARTICLE IV, SECTION 16. Any bond, undertaking, recognizance, consent of surety or written obligation in the nature thereof shall be valid and binding upon the Company when signed by the Chairman of the Board, the President, the Chairman of the Finance Committee, any Executive Vice President, any Senior Vice President, any Serior Vice President and duly attested and sealed, if a seal is required, by the Corporate Secretary or any Department Secretary or any Assistant Corporate Secretary or any Assistant Department Secretary, or shall be valid and binding upon the Company when duly executed and sealed, if a seal is required, by a duly authorized attorney-in-fact or agent, pursuant to and within the limits of the authority granted by his or her power of attorney.

This power of attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Directors of THE TRAVELERS INDEMNITY COMPANY at a meeting duly called and held on the 30th day of November, 1959:

VOTED: That the signature of any officer authorized by the By-Laws and the Company seal may be affixed by facsimile to any power of attorney or special power of attorney or certification of either given for the execution of any bond, undertaking, recognizance or other written obligation in the nature thereof; such signature and seal, when so used being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually

This power of attorney revokes that dated October 11, 1979 on behalf of Norman Sterling, Jr., Paul M. Barbour, Norman C. Headrick, David H. Snead, Thomas J. Sisk, Jr., Judith M. Haines -

IN WITNESS WHEREOF, THE TRAVELERS INDEMNITY COMPANY has caused these presents to be signed by its proper officer and its corporate seal to be hereunto affixed this 19 day of

NDF

80

THE TRAVELERS INDEMNITY COMPANY

Ву

Secretary, Surety

State of Connecticut, County of Hartford-ss:

On this 6th day of March in the year 1980 before me personally came D. J. Nash to me known, who, being by me duly sworn, did depose and say: that he resides in the State of Connecticut: that he is Secretary (Secretary Country). the State of Connecticut; that he is Secretary (Surety) of THE TRAVELERS INDEMNITY COMPANY, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of his office under the by-laws of said corporation, and that he signed his name thereto by like authority.

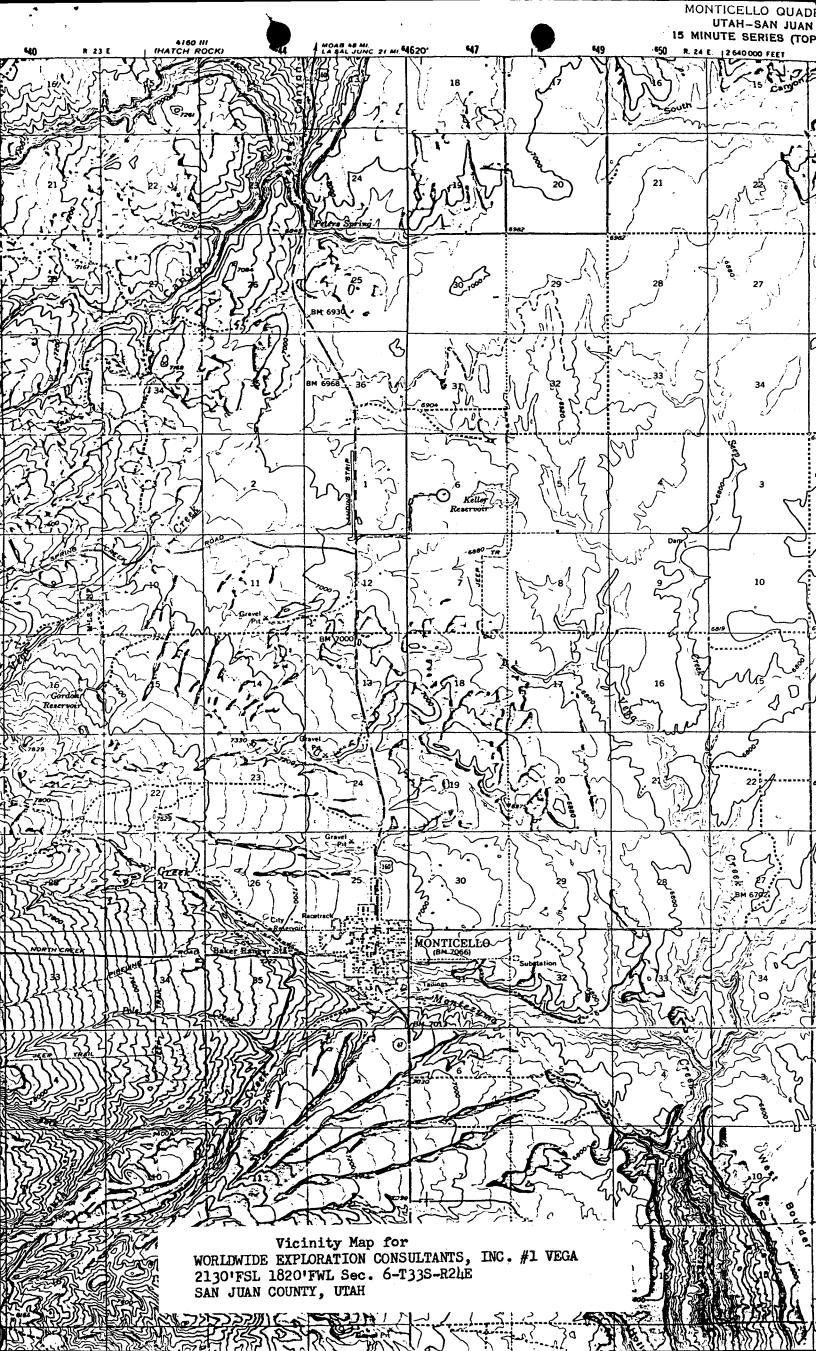
Notary Public

My commission expires

April 1, 1983

(Over)

VNECT



May 23, 1980

Worldwide Exploration Consultants, Inc. 2360 Anaconda Tower 555 17th Street Denver, Colorado 80202

Re: Well No. Vega #1.
Sec. 6, T. 33S, R. 24E.,
San Juan County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil, well is hereby granted in accordance with Rule C-3 General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer Office: 533-5771 Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations co-mence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-037-30554.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder Petroleum Engineer

/b.tm

STATE OF UTAH

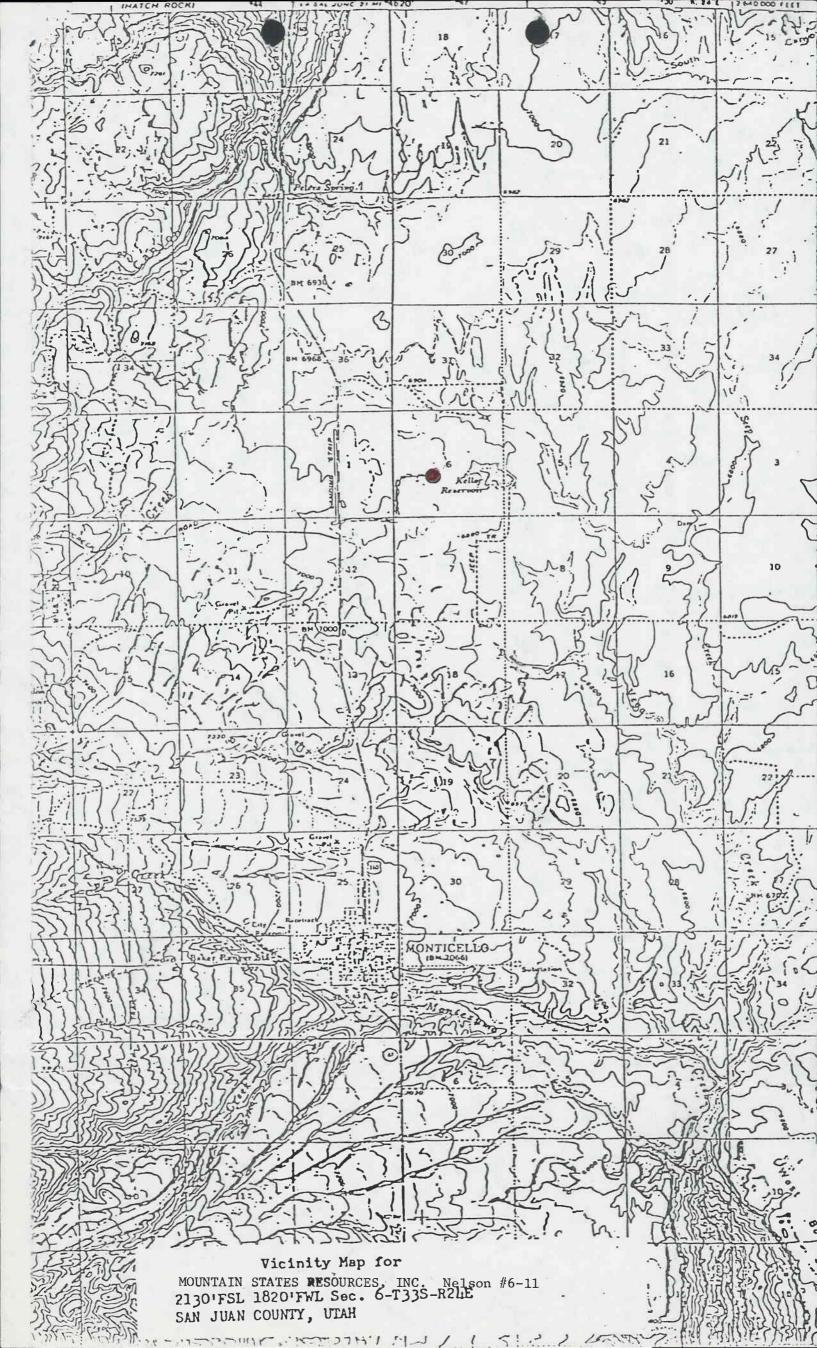
# SUBMIT IN THE ICATE\* (Other instructions on reverse side)

## DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING

<ol> <li>Lease</li> </ol>	Designation	and	Serial	No.

CHANGE OF OPE	RATOR	·		Fee
APPLICATION	FOR PERMIT 1	O DRILL, DEEP	EN, OR PLUG BA	CK 6. If Indian, Allottee or Tribe Name
la. Type of Work				7. Unit Agreement Name
	LL X	DEEPEN [	PLUG BACK	
b. Type of Well Oil □X0 G	as 🗇	•	Single Multiple	Nelson 8. Farm or Lease Name
	ell Other		Zone Zone	<u> </u>
2. Name of Operator		0/1	La martin	#6-11 9. Well No.
MOUNTAIN STATI	ES RESOURCES, II	ic Change	or operator	<u>Wildcat</u> - (Vega Prospect)
•	- Box 176 - Cut	Bank Montana	50/.27	10. Field and Pool, or Wildcat
	ort location clearly and in			Sec. 6 - T33S - R24E - SLN
At surface	2,130' FSL 1,8	20 FWI NESW		11. Sec., T., R., M., or Blk.
		TO THE MEDI		and Survey or Area
At proposed prod. zone				San Juan Utah
14. Distance in miles and	direction from nearest to	vn or post office*		12. County or Parrish 13. State
5 mi. north o	f Monticello, U	tah		•
15. Distance from propos			lo. of acres in lease 1	7. No. of acres assigned
location to nearest property or lease line		•	320	to this well 40
(Also to nearest drlg.  18. Distance from propos	ine, it any)	19. P		0. Rotary or cable tools
<ol> <li>Distance from propos to nearest well, drillir or applied for, on this</li> </ol>	ng, completed, lease, ft. NONE		000' Paradox	Rotary
21. Elevations (Show whe				22. Approx. date work will start*
•		6,915' GL		September 15, 1980
23.			D CEMENTING PROGRAM	55 5 5 m 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12 1/4"	8 5/8"	24#	950	to Surface
7 7/8"	4 1/2"	10.5#	6,000'	250 Sax
<ol> <li>The name EXPLORATION</li> <li>Operator water, ge</li> </ol>	ON, INC., NELSO proposes to dri 1, and chemical	ll be: MOUNTAI N #6-11. ll a Paradox te mud. Casing w	st to a depth of ill be run as sho	S, INC., MONTE GRANDE 6,000', using frésh own above. Pressure control c ram BOP abd 2" choke manifol
ADEM	30450 MV			
APPI	ROVED BY THE	DIVISION		
OF C	NL, GAS, AND M			
DATE	: 10-10-8	Ď		
BY: _	MIJ M	: /		
DY;_	10,000	ray		
	l is to drill or deepen dire			on present productive zone and proposed new productive measured and true vertical depths. Give blowout
Signed	Marolbo	Title Ma	nager of Operatio	ons Date Sept. 2, 1980
(This space for Feder	al or State office use)			
Permit No				
2 C1 504U 27U		***************************************		
Approved by		Title		Date





### MOUNTAIN STATES RESOURCES, INC.

OIL & GAS EXPLORATION & PRODUCTION

ROCKY MOUNTAINS - WESTERN CANADA

September 4, 1980

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES Division of Oil, Gas and Mining 1588 West North Temple Salt Lake City, Utah 84116

Att: Michael T. Minder Petroleum Engineer

Gentlemen:

Re: MSR/MGE NELSON #6-11 WELL Section 6 - T33S - R24E San Juan County, Utah

We are enclosing herewith Change of Operator and application for permit drill the above captioned well, submitted in triplicate.

Please be advised that this well was originally permitted under the name of Worldwide Exploration Consultants, Inc., and approved May 2, 1980, by your office.

Accordingly, we now wish to change the operator to Mountain States Resources, INC. out of Cut Bank, Montana, as enclosed application indicates.

We trust that you will find things in order, as we plan to commence this well around September 15, 1980.

Yours very truly,

MOUNTAIN STATES RESOURCES, INC.

JVM/cbm Enc:

cc: Connie Krivanek, Chief Geologist Mountain Fuel Supply Co.

P. O. Box 2329

Farmington, New Mexico 87401

J. V. Montalban - President and Manager of Operations

cc: Robert E. Pittam, Staff Land Mgr. Mountain Fuel Supply Co. P. O. Box 11368 Salt Lake City, Utah 84139

November 7, 1980

Mountain States Resources, Inc.
Oil & Gas Exploration & Production
Box 176
Cut Bank, Montana 59427

RE: Well No. Nelson #6-11 Sec. 6, T. 33S, R. 24E., San Juan County, Utah

Dear Mr. J.V. Montalban:

Enclosed for your files please find a copy of the Approval Letter sent to the Worldwide Exploration Consultants, Inc., who was former Operator of the above well.

If you should have any question, please contact me at this office.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

BARBARA HILL CLERK TYPIST

/bjh Enclosure/as stated



### MOUNTAIN STATES RESOURCES, INC.

OIL & GAS EXPLORATION & PRODUCTION

ROCKY MOUNTAINS - WESTERN CANADA

November 12, 1980

STATE OF UTAH
Department of Natural Resources
Division of Oil, Gas & Mining
1588 West North Temple
Salt Lake City, Utah 84116

Att: Barbara Hill Clerk Typist

Gentlemen:

NOVI 7 1980
OIL, GAS & MINING

RE: Well No. Nelson #6-11 Sec. 6 - T33S - R24E San Juan County, Utah

We acknowledge receipt of your letter dated November 7, 1980.

We are not quite clear, according to the State of Utah records, if this well is now being carried in the name of MOUNTAIN STATES RESOURCES, INC., as Operator.

If not, we would appreciate your records being changed to reflect the above, as MOUNTAIN STATES RESOURCES, INC. is the active Operator, and is responsible for drilling, completion, and any liability arising therefrom.

Yours very truly,

MOUNTAIN STATES RESOURCES INC.

Montalban - President

JVM/cbm



## STATE OF UTAH



	MICION OF ALL A	AC AND BRIDGE			5. Lease Designation and Serial No.
	VISION OF OIL, G	AS, AND WINING			Fee
					6. If Indian, Allottee or Tribe Name
APPLICATION F	OR PERMIT TO	O DRILL, DEEPEI	N, OR PLUC	<b>3 BACK</b>	or if indian, minuted of tribe frame
Type of Work					7. Unit Agreement Name
DRILL 1	XX.	DEEPEN	PLUG	BACK 🗌	Nelson
Type of Well Oil ♥♥ Gas [	$\neg$	,	Single	Multiple	8. Farm or Lease Name
Oil K Gas Well [ Name of Operator	Other		Zone L	Zone 🗆	#6-11
	T DEGOTTEGE T				9. Well No.
MOUNTAIN STATES Address of Operator	S RESOURCES, I	NC.	·		Wildcat - (Vega Prospect
	Der 176 Cost		F0.405		10. Field and Pool, or Wildcat
Location of Well (Report 1		Bank, Montana	59427		Sec. 6 - T33S - R24E - S
At surface			A TEIN	12 11	11. Sec., T., R., M., or Blk.
2,130' I	FSL 1,820 FW	L NESW			and Survey or Area
At proposed prod. zone					San Juan County, Utah
Distance in miles and dire	ection from nearest town	or post office*	FEB 1 9 198	<del>1</del>	12. County or Parrish 13. State
				/ <b>#</b>	
5 mi. north Mor	rerectio, near		of acres in lease	17. No. o	f acres assigned
location to nearest property or lease line, ft.	E10	•	DIVISION OF	to thi	s well
(Also to nearest drlg. line, Distance from proposed lo		O	P2GAS & MIN	NG 20 Poton	40 y or cable tools
to nearest well, drilling, or applied for, on this least	ompleted,	13. 110	posed depth	zv. motar	<u></u>
Elevations (Show whether			.000' Parad	ox	Rotary  22. Approx. date work will start*
(2110) (2110)	6,915	CT 6 025 '	י די די		
	0,913	GL 6,925	K.B.		September 15, 1980
•	P	ROPOSED CASING AND	CEMENTING PRO	GRAM	,
Size of Hole	Size of Casing	Weight per Foot	Setting Depth		Quantity of Cement
124"	8 5/8"	24#	400'		300 Sax to Surface
7 7/8"	4 1/2"	10.5#	6,000'		250 Sax
1 1/0					
1 1/8					
	ates Resources	. Inc. and Monto	e Grande Ev	nloration	Tro Nolcon #6-11
1. Mountain Sta	ates Resources	, Inc. and Mont	e Grande Ex	ploration	, Inc. Nelson #6-11
1. Mountain Sta	ates Resources en drilled to '	, Inc. and Monto	e Grande Ex 6,155'.	ploration	, Inc. Nelson #6-11
l. Mountain Sta	en drilled to '	Total Depth of	6,155'.	ploration	, Inc. Nelson #6-11
l. Mountain Sta	en drilled to '	, Inc. and Monto Total Depth of February 16, 19	6,155'.	ploration	, Inc. Nelson #6-11
<ol> <li>Mountain Stawell has been</li> <li>This depth w</li> </ol>	en drilled to '	February 16, 1	6,155'. 981.		
<ol> <li>Mountain Stawell has been</li> <li>This depth v</li> <li>5 1/2" produ</li> </ol>	en drilled to '	February 16, 1	6,155'. 981.		, Inc. Nelson #6-11
<ol> <li>Mountain Stawell has been</li> <li>This depth w</li> </ol>	en drilled to '	February 16, 1	6,155'. 981.		
<ol> <li>Mountain Stawell has been well has been well.</li> <li>This depth well.</li> <li>5 1/2" productesting.</li> </ol>	en drilled to s	February 16, 1	6,155'. 981. Total Dept	h for fur	ther evaluation and
<ol> <li>Mountain Stawell has been well has been well has been well as the second with the state of the second with the state of the second with the secon</li></ol>	en drilled to see was reached on action casing leads AND ACKNOWLEDGE	February 16, 1st nas been set to	6,155'. 981. Total Dept RATOR OF TH	h for fur	
<ol> <li>Mountain Stawell has been well has been well has been well as the second with the state of the second with the se</li></ol>	en drilled to see was reached on action casing leads AND ACKNOWLEDGE	February 16, 1	6,155'. 981. Total Dept RATOR OF TH	h for fur	ther evaluation and
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<ol> <li>Mountain Stawell has been well has been well has been well as the second with the state of the second with the state of the second with the secon</li></ol>	en drilled to see was reached on action casing leads AND ACKNOWLEDGE	February 16, 1st nas been set to	6,155'. 981. Total Dept RATOR OF TH	h for fur	ther evaluation and
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Final Geological Report
Nelson 6-11 Well
NE SW Section 6, T. 33 S., R. 24 E.
San Juan County, Utah

For Mountain States Resources, Inc. Monte Grande Exploration, Inc. Cut Bank, Montana

February 27, 1981

By
Worldwide Exploration Consultants, Inc.
Suite 3365 Anaconda Tower
Denver, Colorado
80202

RECEIVE

With I to July

### SUMMARY

Nelson 6-11 Well NE SW Section 6, Township 33 South, Range 24 East San Juan County, Utah

Company (Operator); Mountain States Resources, Inc. Monte Grande Exploration, Inc.

Location: 1,980' FSL; 1,980' FWL of Section 6
Township 33 South, Range 24 East
San Juan County, Utah

Elevation: Ground = 6,915'

Kelly Bushing = 6,926' (Signal-Brinkerhoff Rig)

Status: Waiting on completion rig (February 24, 1981)

Spudded: September 22, 1980 with dry hole spudder

Total Depth Reached: 6,155'

Contractor: Colorado Pacific Drilling Company (Surface to 4,210') Signal-Brihkerhoff Rig 63 (Cardwell 160 rig) from 4,210' to 6,155' (total depth)

Casing: 13 3/8" at 50' 8 5/8" at 2,236' 5 1/2" at 6,155'

Cores: None

Drill Stem Tests: One; 5,774'-5,802'

Samples: 30 foot samples from 0' to 600'
10 foot samples from 600' to 6,000'; 5 foot samples
6,000' to 6,155'

Two splits made plus cloth bag butts

Distribution: Mountain Fuel Supply Company
Mountain State Resources, Inc.
American Stratigraphic Company (Butts)

Mud Logging: Underwood Logging Company, Farmington, New Mexico October 6, 1980 to October 20, 1980; From 2,830' to 4,210' Rocky Mountain Geo Engineering Company, Grand Junction, CO January 28, 1981 to January 16, 1981; From 4,210' to 6,155' (Total Depth).

Dual Induction - SFL (6,075'-2,195') Wire Line Logs:

FDC/CNL/GR (6,155' - 2,236')

GR (2,236' - Surface)

K.B. Elevation = 6,925' (Colorado Pacific Rig -Formation Tops:

to 4,200'); 6,926' (Brinkerhoff-Signal Rig - to

6,155')

Ground Elevation = 6,915'

	FORMATION	TOPS
UNIT	Drill Depth	Depth
CIVII	Feet	Subsea
CRETACTEOUS		
Dakota Sandstone	G	<u> </u>
	Surface	+6,915'
JURASSIC		
Morrison Formation	240'	
Summerville Formation	390'	+6,685'
Curtis Formation	680 <b>'</b>	+6,535'
Entrada Formation	760 <b>'</b>	+6,245'
Carmel Formation	950 <b>'</b>	+6,165'
Navajo Formation	1,065'	+5,975
	1,003	+5,860'
JURASSIC-TRIASSIC		
Kayenta Formation	1,220'	+5,705
	-,	13,703
TRIASSIC		
Wingate Formation	1,420'	+5,505'
Chinle Formation	1,720'	+5,205'
Shinarump Formation	2,575'	+4,350'
Moenkopi Formation	2,796'	+4,129'
Deput		.,
PERMIAN		
Cutler Formation	2,870'	+4,056'
The said of the transfer and		
PENNSYLVANIAN Hermosa Formation		
Honaker Trail	3,750'	+3,776'
Paradox	4,625'	+2,301'
Upper Ismay	5,351'	+1,577'
Second Shale	5,681'	+1,245'
Piute Knoll (Lower Upper Ismay)	5,820'	+1,106'
Lower Ismay Shale	5,834'	+1,092'
Lower Ismay Lst.	5,918'	+1,008'
"B" Zone Shale	5,986'	+ 940'
Desert Creek	6,044'	+ 882'
Salt	6,102'	+ 824'
	6,144'	+ 782'

Engineering - Mr. J. V. Montalban Supervision:

Geological - Worldwide Exploration Consultants, Inc.,

Denver, Colorado

S. L. Pederson - Surface to 4,210'

E. F. Durkee - 4,210' to 6,155' (Total Depth)

General Results:

The well was drilled with air and mist/water from the surface to 2,240 feet at which point water became a problem and 8 5/8" surface casing was set at 2,236 feet. The well was then mist drilled to 2,716 feet, where the hole started sloughing and the decision was made to drill with mud. Drilling mud was used as the drilling fluid from 2,716 feet to 6,155 feet (total depth). At 4,210 feet the hole was filled with heavy mud and the small rig of Colorado Pacific Drilling Company was released on October 20, 1980.

Signal-Brinkerhoff's Rig 63 was moved on location on January 26, 1981. The hole was reentered, mud conditioned and hole reamed to 4,210 feet. Drilling of new hole commenced on January 31, 1981 and continued to a total depth of 6,155 feet on February 15, 1981.

The test encountered interesting gas shows in the Honaker Trail, Upper Ismay, Lower Upper Ismay (Piute Knoll equivalent), and upper bench of the Desert Creek. The lower bench was not present. Another well should be drilled one or more miles south to southwest. Such a location would provide an opportunity to hopefully find the lower Desert Creek porosity zone, such as present at Bug field to the southeast.

COMPANYM	OUNTAIN STATES	RESOURCES, IN	C	
LEASE Gwen	Vier Nelson	WELL N	o. <u>#6-11</u>	***************************************
San	Juan County	, Utah		<del></del>
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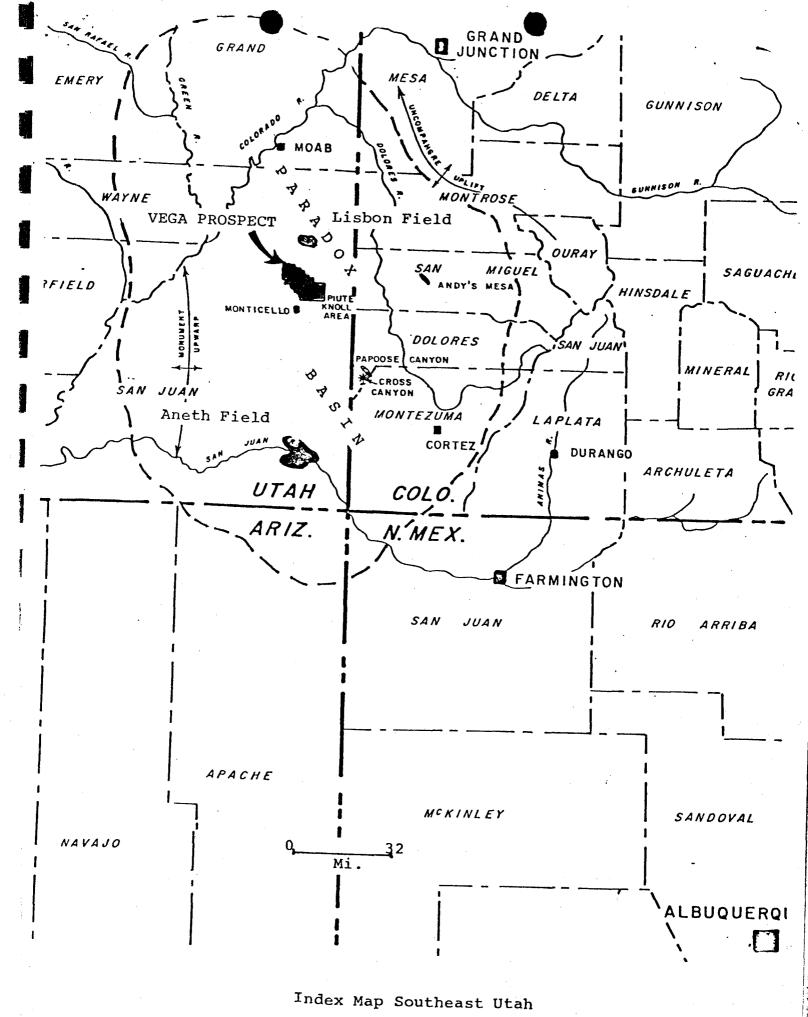


Figure 2

#### STRATIGRAPHY

The stratigraphic section penetrated at Nelson 6-11 is discussed in general below. The detail sample descriptions are provided in Appendix 1. Electrical and radioctive characteristics of the section are illustrated on the enclosed logs. Mud logs illustrate the zones of stratigraphic interest where hydrocarbons were detected in the mud system while drilling. Cretaceous

<u>Dakota Formation</u> - The Dakota Sandstone lies on the surface at the Nelson wellsite underneath a thick layer of surface mantle.

The Dakota consists of light gray, very fine-to fine-grained sandstones and thinly interbedded light gray carbonaceous shales. These sediments were deposited in a transgressive coastal plain depositional environment.

### Jurassic

Morrison Formation - Sample top = 240'.

The section encountered by the drill bit consists of varicolored shales, orange-red, red, greenish-gray to green with many
mottled colored zones or streaks. These beds are 150 feet thick
and were deposited in a fluvial to floodplain environment.

<u>Summerville Formation</u> - Sample top = 390'

This section is approximately 290 feet thick and consists of siltstones with thinly interbedded sandstones. The siltstones are greenish-gray to gray with scattered quartz grains throughout. The sandstones are white, very fine-to fine-grained and well cemented.

Wingate Formation - Sample top = 1,420'

This 300 foot sequence consists of sandstone, white, with various zones of fine-grained and medium to coarse grains and some thinly interbedded varicolored shales. This unit was deposited in an eolian environment.

Chinle Formation - Sample top = 1,720'

This 855 foot sequence consists of interbedded varicolored siltstones, red, gray, to green, with scattered quartz grains and sandstones, white to gray, micaceous, very fine to fine-grained. These sediments were deposited in a fluvial floodplain to lacustrine environment.

Shinarump Formation - Log top = 2,575'

This 70 foot interval consists of shales, purple red, brick red, burnt orange and conglomerates at 2,610 feet consisting of rounded pebbles, siltstones and shales intermixed and traces of limestone. This sequence was probably deposited in a fluvial environment.

Moenkopi Formation - Log top = 2,796'

This unit comprises 74 feet of varigated shales with some thin interbedded sandstones.

Cutler Formation - Log top = 2,870'

A dormantly sandy, red bed section 880 feet thick.

Hermosa Formation - Log top = 3,750'

This interbedded unit of sandstones, orange-red to purple shales and gray dense limestones is feet thick.

Honaker Trail Formation - Log and sample top = 5,625 feet.

Dominantly a carbonate sequence of light brown to tan and light gray limestones. These limestones are predominantly dense and argillaceous. This unit has rare oolitic zones and occasional fossiliferous horizons. Interbedded there are some fine-grained, tight, calcareous sandstones. The unit is feet thick.

Paradox Formation - Log top at 5,351'.

Consists principally of limestones, basinal to neritic types, some cherty limestones, occasional colitic limestones. Including Ismay and Desert Creek Members to top of the Salt at 6144 feet, the overall unit is 793 feet thick. Members that can be distinguished are:

Upper Ismay - Limestones (139 feet thick) with a log top at 5681 feet continuing downwards and becoming more argillaceous to 5820 feet where a prominent gray-dark gray calcareous shale break occurs. One very porous coral reef zone is present at 5760-5770 feet.

"2nd Shale" - A dark gray calcareous shale 14 feet thick occurs between 5820 and 5834 feet.

Lower Upper Ismay (Piute Knoll Zone)

This zone correlates with the gas producing limestones in the Mountain Fuel Supply Company's Piute Knoll 1 well, Section 26, T. 33 S., R. 26 E., ll miles southeast of the Nelson 6-11. This unit, topped at 5834 feet is 84 feet thick. It is comprised of light gray limestones, some interbedded white, very fine-grained sandstones, occasional gray shale interbeds and a white anhydrite unit at the top.

Lower Ismay Limestone - Log top at 5986 consists of interbedded white anhydrite and gray, dense, microcrystalline limestone. It has some interbedded white to tan fine-grained sandstone with low porosity. This member is 58 feet thick.

"B" Zone Shale - Log top at 6044 feet. This is a very car-bonaceous, black to dark gray shale with high organic content.
In the lower part it has a dark gray siltstone unit about ten feet thick.

Desert Creek - This unit has a log top of 6,102 feet. It is confined to only an "upper bench" at the Nelson 6-11. This unit consists of anhydrite and some limestones, brown, ranging from medium to microcrystalline to dense. It is not a good appearing reservoir rock. However, it did provide two good gas shows on the hot wire and chromatograph.

The regional position of the Nelson 6-11 is slightly to the north and east of stratigraphic line of demarcation where the lower bench of the Desert Creek is developed. The upper bench of the Desert Creek is 42 feet thick and the lower bench is absent.

Paradox Salt - At 6,144 feet (log top) the well bore entered salt. Based on drilling time the top of the salt is at 6,147 feet.

### STRUCTURE

Figure 3 illustrates the general structural configuration of the Paradox basin in the vicinity of the Nelson 6-11 well. The drilling of the Nelson 6-11 provided no data which would greatly alter the shape of the basin in the subject area. The formation tops as determined from logs and samples do suggest that the pre-drilling local structure based on seismic work was incorrect with respect to depth determinations. Whether or not local closure around the Nelson 6-11 exists cannot be disproven by one well alone.

Prior to drilling it was t-ought that the Nelson 6-11 would be in excess of 100 feet high to the Byrd-Frost Randall well in Section 23, T. 33 S., R. 24 E., about four miles southeast of the Nelson 6-11. In actual fact the Nelson 6-11 is only about 13 feet higher than the Randall well at the top of the Pennsylvanian "B" Zone shale horizon.

As the principal oil traps in the Nelson 6-11 well are believed to be stratigraphic in nature, the structural configuration of the general area is believed to be favorable (low angle regional tilts; broad terraces, and possible low relief structural closures).

Table 2 is a tabulation of the "B" Zone shale in key wildcat wells in the Paradox basin surrounding the Nelson 6-11 well.

### SAMPLE DESCRIPTIONS

Nelson 6-11 (Vega Prospect) NE SW Section 6, T. 33 S., R. 24 E. San Juan County, Utah

Interval	Description
0150 - 0180	Siltstone, gray to white with scattered medium quartz grains.
0180 - 0210	Siltstones as above with Sandstones, white to gray, abundant pyrite grains.
0210 - 1240	Sandstones, white, fine to medium grained well cemented.
	Sample Top Morrison Formation - 240'
0240 - 0270	Shale orange-red with some mottled green.
0270 - 0300	Shale as above.
0300 - 0330	Shale, red and greenish-gray.
0330 - 0360	Shale, greenish-gray.
0360 - 0390	Shale, red.
	Sample Top Summerville Formation - 390'
0390 - 0420	Siltstone, greenish-gray, scattered quartz grains.
0420 - 0450	Siltstone as above.
0450 - 0480	Siltstone as above, Shale red.
0480 - 0510	Siltstone as above.
0510 - 0540	Siltstone as above.
0540 - 0570	Siltstone as above.
0570 - 0600	Siltstones as above with Sandstone white, well cemented.
0600 - 0610	Siltstone-Sandstone as above.
0610 - 0620	Siltstone as above.
0620 - 0630	Siltstone red, sandy streaks with Sandstones as above.
0630 - 0640	Siltstone as above.

Interval	Description
0640 - 0650	Siltstone, red, gray, green, mottled chips.
0650 - 0660	Siltstone, greenish-gray.
0660 - 0670	Siltstone as above, sandy streaks.
0670 - 0680	Siltstone, Sandstone, gray to white, fine grained, well cemented.
	Sample Top Curtis Formation - 680'
0680 - 0690	Siltstone white, fine grained, well cemented.
0690 - 0700	Sandstone as above.
0700 - 0710	Sandstone white, fine to medium grained, well cemented good P & P.
0710 - 0720	Sandstone as above.
0720 - 0730	Siltstone gray to green to red, sandy streaks.
0730 - 0740	Siltstone as above.
0740 - 0750	Siltstone as above.
0750 - 0760	Siltstone as above, Shale red.
	Sample Top Entrada Formation - 760'
0760 - 0770	Sandstone, white, fine to medium grained, well cemented.
0770 - 0780	Sandstone as above.
0780 - 0790	Shale, red, Siltstones, gray, green, red.
0790 - 0800	Shale and Siltstones as above.
0800 - 0810	Sandstones, white, very fine grained, well cemented.
0810 - 0820	Siltstone, mottled red and green.
0820 - 0830	Siltstone as above, some Sandstones as above.
0830 - 0840	Siltstone as above.
0840 - 0850	Siltstone as above, trace Sandstones as above.
0850 - 0860	Siltstones as above.

Interval	Description
0860 - 0870	Siltstones as above.
0870 - 0880	Siltstones as above.
0880 - 0890	Siltstones as above, mainly red.
0890 - 0900	Siltstone as above, mainly red.
0900 - 0910	Sandstones, white, fine grained, well cemented, Silt-stone, brick red.
0910 - 0920	As Above.
0920 - 0930	As Above.
0930 - 0940	As Above.
0940 - 0950	Sandstone, white fine grained, well cemented.
	Sample Top Carmel Formation - 950
0950 - 0960	Siltstone, brick red, sandy streaks, Shale, red.
0960 - 0970	Siltstone as above.
0970 - 0980	Siltstone as above.
0980 - 0990	Siltstone as above with mottled greenish gray spots.
0990 - 1000	Siltstone as above.
1000 - 1010	Siltstone as above.
1010 - 1020	Siltstone as above.
1020 - 1030	Siltstones varicolored and Sandstones, white, very fine grained.
1030 - 1040	Siltstone, brick red, sandy streaks.
1040 - 1050	Siltstone as above.
1050 - 1060	Siltstone as above.
	Sample Top Navajo Formation - 1,065'
1060 - 1080	Sandstone, white, very fine grained, well cemented, as above, sub-angular to sub-rounded.
1080 - 1090	Sandstone as above.

Interval	Description
1090 - 1100	Sandstone as above, becoming fine to medium grained.
1100 - 1110	Sandstone as above.
1110 - 1120	Sandstone as above becoming medium grained.
1120 - 1130	Sandstone as above.
1130 - 1140	Sandstone as above.
1140 - 1150	Sandstone as above.
1150 - 1160	Sandstone as above.
1160 - 1170	Sandstone as above.
1170 - 1180	Sandstone as above.
1180 - 1190	Sandstone as above.
1190 - 1200	Sandstone as above.
1200 - 1210	Sandstone as above.
1210 - 1220	Sandstone as above.
	Sample Top Kayenta Formation - 1,220'
1220 - 1230	Siltstone brick red, Shale, purple-red.
1230 - 1240	Siltstone as above.
1240 - 1250	Siltstone as above.
1250 - 1260	Siltstone as above sandy streaks.
1260 - 1270	Siltstone as above.
1270 - 1280	Siltstone as above.
1280 - 1290	Siltstone as above, Sandstones, white very fine to fine grained, well cemented.
1290 - 1300	Sandstones as above.
1300 - 1310	Sandstone as above, rose to red in color.
1310 - 1320	Sandstone as at 1290'.
1320 - 1330	Sandstone as above.

	Interval	Description
	1330 - 1340	Sandstone as above.
	1340 - 1350	Sandstone as above.
	1350 - 1360	Sandstone as above, Shale red, Siltstone brick red.
	1360 - 1370	Sandstone white, very fine grained, well cemented.
	1370 - 1380	Sandstone as above.
	1380 - 1390	Sandstone as above, trace Siltstones vari-colored.
	1390 - 1400	Shales-Siltstone vari-colored.
	1400 - 1410	Sandstone, white, very fine grained, well cemented.
-	1410 - 1420	Siltstone, varicolored and mottled, trace Sandstone.
		Sample Top Wingate Formation - 1,420'
	1420 - 1430	Sandstone, white, very fine grained, well cemented.
	1430 - 1440	Sandstone as above.
	1440 - 1450	Sandstone as above, some zones medium to coarse grained.
	1450 - 1460	Sandstone as above.
	1460 - 1470	Sandstone as above.
	1470 - 1480	Sandstone as above.
	1480 - 1490	Sandstone as above with varicolored Shales.
	1490 - 1500	Sandstone as above with varicolored Shales.
	1500 - 1510	Sandstones, white, fine grained, cemented, some P & P, Shale, orange-red, Siltstone, pale green to gray, as above.
	1510 - 1520	As Above.
	1520 - 1530	Sandstones, white, very fine to fine grained, cemented, good P & P, sub-angular to sub-rounded.
	1530 - 1540	Sandstone as above.
	1540 - 1550	Sandstone as above.
•	1550 - 1560	Sandstone as above.

Interval	- Description
1560 - 157	
1570 - 1580	Sandstone as above.
1580 - 1590	Sandstone as above.
1590 - 1600	Sandstone as above.
1600 - 1610	Sandstone as above, scattered medium grains.
1610 - 1620	Sandstone as above.
1620 - 1630	Sandstone as above.
1630 - 1640	Sandstone as above with Siltstone, mottled purple, green, gray.
1640 - 1650	Sandstone as above.
1650 - 1660	Sandstone as above with some Siltstone as above.
1660 - 1670	Sandstone as above, some reddish colored.
1670 - 1680	Sandstone as above, Siltstones as above with quartz
1680 - 1690	Sandstone as above, few quartzitic streaks.
1690 - 1700	Sandstone as above.
1700 - 1710	Sandstone as above.
1710 - 1720	Sandstone as above, glauconitic grains.
	Sample Top Chinle Formation - 1,720'
1720 - 1730	Siltstone, red, green, gray, scattered quartz grains.
1730 - 1740	Siltstones as above, Sandstone, gray, fine grained, well cemented.
1740 - 1750	Sandstone as above, micaceous.
1750 - 1760	Sandstone as above.
1760 - 1770	Sandstone as above with silty mottled balls.
1770 - 1780	Sandstone as above.
1780 - 1790	Sandstone white to rose-red, fine to medium grained silty balls randomly scattered, well cemented, with Siltstones, red to green, sandy streaks.

Interval	Description
1790 - 1800	
1800 - 1810	
1810 - 1820	
1820 - 1830	Sandstone white, rose-red, fine to coarse grained, well cemented.
1830 - 1840	Sandstone as above, Siltstone, gray, grayish green.
1840 - 1850	Sandstone-Siltstone as above, predominantly red.
1850 - 1860	As Above.
1860 - 1870	Siltstone brick red, mottled gray spots.
1870 - 1880	Siltstone as above, trace Sandstone.
1880 - 1890	Siltstone as above.
1890 - 1900	Siltstone as above, Sandstone, white, rose, brick red very fine grained, well cemented.
1900 - 1910	As Above.
1910 - 1920	As Above.
1920 - 1930	Sandstone-Siltstones as above.
1930 - 1940	Sandstone as above.
1940 - 1950	Sandstone as above.
1950 - 1960	Sandstone as above.
1960 - 1970	Sandstone white, as above, Siltstone, purple.
1970 - 1980	Sandstone, white, very fine grained well cemented.
1980 - 1990	Sandstone as above.
1990 - 2000	Sandstone as above.
2000 - 2010	Sandstone as above.
2010 - 2020	Sandstone as above.
2020 - 2030	Sandstone as above, some becoming rose to brick red.
2030 - 2040	Sandstone as above.
	Sandstone as above, Siltstones varicolored.

Interval	- Description
2050 - 206	
2060 - 207	O Sandstones, white, rose, red, very fine grained well cemented, minor Siltstones as above.
2070 - 208	
2080 - 209	O As above.
2090 - 2100	As above.
2100 - 2110	Sandstone white to rose, very fine grained, well cemented.
2110 - 2120	As above.
2120 - 2130	As above.
2130 - 2140	As above.
2140 - 2150	As above with varicolored Shales and Siltstones.
2150 - 2160	As above.
2160 - 2170	As above.
2170 - 2180	As above.
2180 - 2190	As above.
2190 - 2200	Sandstone, brick red, very fine grained, well cemented Shale, purple, brick red, green, Siltstone, red.
2200 - 2210	As above.
2210 - 2220	As above.
2220 - 2230	As above.
2230 - 2240	As above.
2240 - 2250	Siltstone, brick red, calcareous.
2250 - 2260	Siltstone as above, Shale, brick red, calcareous.
2260 - 2270	Siltstone-Shale as above, Shale greenish-gray mottled.
2270 - 2280	Siltstone-Shale as above.
2280 - 2290	Shale-Siltstone as above, trace Limestone, gray, finely crystalline.

Interval	
2290 - 2300	Description
	and bittestone as above.
2300 - 2310	Shale-Siltstone as above, mottling of greenish-gray increasing.
2310 - 2320	Shale-Siltstone as above.
2320 - 2330	Shale brick red and greenish-grah mottled, calcareous red dominant.
2330 - 2340	Shale as above.
2340 - 2350	Shale as above.
2350 - 2360	Shale as above, some purplish, red, calcareous.
2360 - 2370	Shale as above, Limestone, brick red, to greenish red mottled finely crystalline.
2370 - 2380	Shale as above, very calcareous.
2380 - 2390	Shale-Limestone inclusions intercalated as above.
2390 - 2400	Shale as above, mottled greenish-gray spots, calcareous.
2400 - 2410	Shale as above.
2410 - 2420	Shale as above.
2420 - 2430	Shale as above.
2430 - 2440	Shale as above.
2440 - 2450	Shale as above.
2450 - 2460	Shale as above.
2460-2470	Shale as above.
2470 - 2480	Shale as above.
2480 - 2490	Shale as above.
2490 - 2500	Shale as above.
2500 - 2510	Shale as above.
2510 - 2520	Shale as above.
2520 - 2530	Shale as above.
2530 - 2540	Shale as above.

Interval	Description
2540 - 2550	Shale as above.
2550 <b>- 2</b> 560	Shale as above.
	Sample Top Shinarump Formation 2,560'
2560 - 2570	Shale, purple-gray, brick red, burnt orange, inter- bedded.
2570 - 2580	Shale as above.
2580 - 2590	Shale as above.
2590 - 2600	Shale as above.
2600 - 2610	Shale as above.
	Formation Tops
2610 - 2620	Conglomerate, rounded pebbles, Siltstone pebbles calcareous with Shales as above.
2620 - 2630	Conglomerates and Shales as above.
2630 - 2640	Shale, brick red, lime green, calcareous trace con- glomerate as above.
	Sample Top Moenkopi Formation - 2,630'
2640 - 2650	Shales as above, interbedded.
2650 - 2660	Shales, brick red, lime, gray, purple gray trace lime- stone, gray finely crystalline.
2660 - 2670	Shales as above trace Limestone.
2670 - 2680	Shales as above ochre color, trace Limestone.
2680 - 2690	Shales as above.
2690 - 2700	Shales as above.
2700 - 2710	Shales as above.
2710 - 2720	Shale, brick red, purple-gray, ochre, gray, calcareous silty streaks.
2720 - 2730	Shales as above.
2730 - 2740	Shales as above Siltstone, purple red, sandy streaks.

Interval	Description
2740 - 2750	Siltstone, purplish-gray, micaceous, sandy streaks, very fine grained, Shale, brick red, ochre, purple, greenish-gray.
2750 - 2760	Siltstone and Shales as above.
2760 - 2770	Siltstone and Shales as above, trace coal, black.
2770 - 2780	Siltstones and Shales as above, Sandstones, gray to red, very fine grained, micaceous, well cemented.
2780 - 2790	Sandstone, gray to greenish-gray to rose to red, very fine grained, well cemented, glauconitic, abundant dark minerals, some Siltstones as above.
2790 - 2800	Sandstones as above.
2800 - 2810	Sandstones and Siltstone as above.
2810 - 2820	Sandstones-Siltstones as above.
2820 - 2830	Sandstones-Siltstones-Shales as above.

Underwood Logging Unit arived on location to handle sample description (see Mud Log for interval 2830 to 4210 feet)

# Resume Operations

January 26, 1981 at 4210 feet with larger rig. Sample descriptions by E. F. Durkee; mud logging by Rocky Mountain Geo Engineering Company (See Mud Log)

# SAMPLE DESCRIPTION Nelson 6-11 Well, NE SW Section 6-T33S-R24E San Juan County, Utah E. F. Durkee

- 4300 4310 SH, RD-RD-BN, F-TEXT-SILTY, MIC, CALC, SE SH, GY, F-TEXT.
- 4310 4320 A.A.
- 4320 4340 A.A.
- 4340 4350 SS, WH, RD-WH, F-GN, S-ANG, CALC, ARGIL.
- 4350 4360 A.A., W/SE SLTS VFGN SS, WH, RIGHT, TR. LST, GY, DS-VF XLN.
- 4360 4370 SH, RD-RD BN, DS, W/TR SS & SLTS. A.A., SE LST, FRAGS (V. RARE) AND TR SH, LAVENDER, DS.
- 4370 4380 SS, RD-SH, F-GN, S-ANG, V. ARGIL.
- 4380 4390 SH, RD-RD-BN, F-TEXT.
- 4390 4400 A.A. TR, SIL, F-GN SS, TIGHT.
- 4400 4410 A.A.
- 4410 4420 A.A. R. STRK LS, GY, DS.
- 4420 4430 SH, RD-BN, SILTY TO CLAYEY.
- 4430 4440 A.A. TR. SLIST, WH, DS, TIGHT.
- 4440 4450 SLIST, ARK, TWO TYPES RD BN & LAVENDER TR LST, LT BN, DS, M-XLN.
- 4450 4460 LST LT-BN, DS, MIL-XLN, W/SLIST. A.A.
- 4460 4470 SLIST, RD BN, W/TR LST. A.A.
- 4470 4480 SLIST SH, RD-BN,

INTBDD SLTS & LST, A.A., TR SS, RD VF-GN,

ARGIL - CIRC SAMPLER OUT @ 4491'.

4490 - 4500 SS, RD-BN, VF-FRN, ARGIL W/TR LST, BN, OOLITIC, W/SLIST. A.A.

- 4500 4530 SS, WH, F-M-GRN, S-ANG, CALC, GEN. TIGHT, SL POROSITY, NSOG, OCC LGE GRNS QTZ.
- 4530 4540 SLIST, ARK, RD-BN, W/INTBDD RD-BN SH.
- 4540 4550 A.A., W/SH, RD-BN.
- 4550 4560 A.A., RARE STRK LST, RD-BN, DS, TIGHT.
- 4560 4570 A.A.
- 4570 4600 A.A. RD-BN BRICK FACTORY A.A.
- 4600 4610 A.A. w/SS, WH, RD-WH, F-GN (Circulate samples @ 4608', NSOG).
- 4610 4620 A.A. TR SS, WH, F-GN, CALC, TIGHT.

  (Change from dominant reds to gray appearance of lithologic samples)
- 4620 4630 SS, GY-GY-WH, F-GN, S-RDD S-ANG, ARK IN PT. CALC.

  (Drilling break 4601-4628', 1 to 1-1/2'/ft.) NSOG.

  (4625', Top Honaker Trail Formation)
- 4630 4640 A.A. W/GY, ARGIL, SLTST.
- 4640 4650 LST, GY, GY-BN, DS-MIC-XLN, TIGHT.
- 4650 4660 A.A., OCC STRKS INTBDD BRICK RED SHS.
- 4660 4670 A.A. W/TR ARK SS, RD, SIL, TIGHT. W/SE LST, WH, DS.
- 4670 4700 A.A. W/SE SLTST, GY, TIGHT.
- 4700 4710 SLTST, WH, V. CALC, TIGHT.
- 4710 4720 A.A. W/INTBDD DK-BN, LST. DS, SE F-XLN.
- 4720 4740 A.A.
- 4740 4750 LST, GY-BN AND WH, INTBDD, DS-MIC-XLN.
- 4750 4760 A.A.
- 4760 4770 A.A. TR CHT, BN.
- 4770 4790 A.A.

4790 - 4800A.A. W/SLTST, GY, AND SH, DK-GY-BLK, TR SS MIC. SS (muscovite)

4800 - 4810 LST, LT-GY - BN, DS-MIC-XLN, W/TR CHT. DK-BN TO TRANSL: TR SLTST, WH, CALC, TIGHT.

4810 - 4820 A.A.

4820 - 4840A.A., TR SLTST, GN-GY, TIGHT.

4850 - 4860 LST, A.A. W/TR SS, WH, GY-WH, F-VFGN, S-ANG, CALC, TIGHT.

4860 - 4870 A.A.

4870 - 4880 LST, OOLITIC, LT-BN, LEACHED, POROUS DRILLED OFF, CIRCULATE OUT, NSOG.

4880 - 4890LST, GY-BN, DS, M-XLN, W/TR LST, OOLITIC.

4890 - 4900 LST. A.A.

4900 - 4910 LST, GY, GY-BN, DS, MIC-XLN, TIGHT W/SLTST, GY, WH, CALCAR, TIGHT.

4910 - 4920 SLTST, WH, GY-WH, CALC, TIGHT.

4920 - 4930 SLTST, A.A.

4930 - 4940 LST, GY-WH, LT-BN, DS, MIC-XLN, TIGHT.

4940 - 4950 A.A.

4950 - 4960 A.A.

4960 - 4970 A.A.

4970 - 4980 A.A.

4980 - 4990 A.A., Poor sample.

4990 - 5000 LST, GY, GY-WH, LT-BN, DS, M-XLN, TIGHT W/INTBDD SLTST, BN-WH, TIGHT. W/TR DK RD-BN SH, F-TEXT, SMOOTH.

5000 - 5010 SLTST, BN TO RD-BN W/SH, ORANGE-RD, SMOOTH.

5010 - 5020 SLTST, WH - GY-WH, CALCAR, TIGHT.

- 5020 5030 LST, WH, DS, MIC-XLN. W/TR SLTST, CN.
- 5030 5050 A.A.
- 5050 5060 LST, WH-LT TAN, DS
- 5060 5070 A.A., TR SS, WH, F-M-GN, S-ANG-SRDD, LOW POROSITY, NO SHOW.
- 5070 5080 LST. A.A., TR SLTST, DK-BN.
- 5080 5090 INTBDD LST, LT-TAN AND SLTY SH, GY, GY-BN
- 5090 5110 A.A.
- 5110 5120 SH, SLTY SH, GY, SLT MIC, F-TEXT.
- 5120 5130 LST, A.A., W/SH A.A.
- 5130 5140 LST, LT TAN DK BN GY-BN, F-XLN M-XLN, TR SLTY, MIC SH & R. SS, WH-F-GN, S-ANG.
- 5140 5150 LST, KD-GY, ARGIL, TR LST, LT TAN, DS M-XLN.
- 5150 5160 LST, DK-GY, SLTY, ARGIL, DS-M-XLN.
- 5160 5170 LST, LT-TAN, DS-M-XLN, TR LST, GY, A.A.
- 5170 5180 LST, GY, DK-GY, SLTY-TEXT, ARGIL AS IN 50-60.
- 5180 5190 LST. GY, GY-BN, SLTY.
- 5190 5200 SLTST, LT-GY-WH, TO VF-GN SS, WH, TIGHT, GLAUC.
- 5200 5210 A.A. W/LST, TAN, FOSSIL, OOL.
- 5210 5220 LST, GY, AND LT-GY, M-XLN, OOL, FOSSIL, TO DK-GY, ARGIL.
- 5220 5230 A.A.
- 5230 5240 LST, GY DK-GY, ARGIL, DS-MIC-XLN
- 5240 5300 A.A.
- 5300 5310 A.A.
- 5310 5320 A.A., TR SS, WH, F-BN, S-ANG, GLAUC, TIGHT.
- 5320 5330 A.A. SE LST, GY-WH, M-XLN, PYR.
- 5330 5340 LST, GY, DK-GY, ARGIL. W/MUCH SS, A.A.

5350 - 5360 A.A. INCR IN SS, GN-WH, F-GN: Drilling break from 10'/ft. to 3'-5'/ft; gas kick at this level (5358-66') of 130 units. Total gas; 550 ppm Methane.

5360 - 5370 LST, LT-TAN, MIC-XLN, FOSSIL, TR OOL.

5370 - 5380 A.A. TR SH, LT-GY, CALCAR.

5380 - 5390 A.A. TR CHT, LT TAN, TRANSL.

5390 - 5400 LST, DK-GY, F-TEXT, MIC-XLN.

5400 - 5410 A.A., TR CHT.

5410 - 5420 LST, DK GY W/LST, LT-TAN A.A.

5420 - 5430 A.A.

5430 - 5440 LST, LT TAN A.A. W/SL LST, DK-GY, ARGIL.

5440 - 5450 A.A., FOSS SHELL FRAGS COMMON.

5450 - 5470 A.A., TR CHT, LT TAN, TRANSL.

5470 - 5500 A.A.

5500 - 5510 LST, LT-TAN, W/INCR AMT. LST, DK-GY, ARGIL.

5510 - 5520 A.A. W/TR SLTST, LT-GY, GY, DS.

5520 - 5530 A.A.

5530 - 5540 A.A. W/SE SH, DK-GY, CALC, LST OCC. OOL.

5540 - 5550 A.A., M GY, DK GY, LST, DS.

5550 - 5560 A.A.

5560 - 5570 A.A. W/LST, LT TAN, OOL., TR SLTST, WH, CALC, TIGHT.

5570 - 5580 LST, A.A., SL CHT, TAN, TRANSL., SL OOL. LST.

5580 - 5590\* A.A., W/SLTST, GY-TAN, CALC TIGHT TR LST W/PINPOINT POROSITY; NSOG IN SAMPLES.

5590 - 5600 LST, A.A.

\* Gas show from Drilling break at 5584-85' & 5586-87 = 70 units total gas;  $1612 \text{ ppm } C_1$ ,  $523 \text{ ppm } C_2$ ,  $125 \text{ ppm } C_3$ .

5600 - 5610 LST, GY, BN, DS-MIC-XLN, TR CHT, BN, TRANSL.

5610 - 5630 A.A.

5630 - 5640 A.A. Becoming SHLY, ARGIL.

5640 - 5650 SH, GY, CALCAR GRADING TO ARGIL LST.

5650 - 5660 A.A. W/INCR SLTST, TAN, CALC, TIGHT.

5660 - 5670 SLTST, TAN, CALCAR, W/SL SH, GY, & ARGIL LST., DS AND LST, TAN DS.

5670 - 5680 SLTST, GY, DK GY, W/TR LSTS A.A.

5680 - 5690 A.A.

\* Gas show @ 5697'; total units 32 (C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>)

\* Gas show @ 5707'; total units 54  $(C_1-C_5)$ 

5690 - 5700 LST, GY-BLK, DS, ARGIL, SL INTBDD LST, TAN, DS.

5700 - 5710 A.A. TR. DK-GY SH, SMOOTH-TEXT.

5710 - 5720 SLTST, GY, ARGIL, TIGHT, W/SL LSTS A.A.

5720 - 5730 SH, GY, DK-GY, SILTY-TEXT W/TR LSTS, A.A., SE ARR OOL.

5730 - 5740 LST, TAN, LT-BN, DS, W/ABUND. CHT, LT-TAN, TRANSL.

5740 - 5750 LST, A.A., NOTEABLE DECREASE IN DK GY SH-SILTST AND ARGIL LST, SL CHT. A.A.

5750 - 5760 LST, LT TAN, LT BN, DS, MIC-XLN; TR CHT, TAN.

5760 - 5770 LST, LT TAN <u>W/ABUND</u>. FOSSIL DEBRIS CORAL HASH, SL

OPEN LATICE WORK GIVES LT PALE YELLOW CUT; VERY

WEAK BUT @ 5763-64' gas kick w/120 total units;

C<sub>1</sub> through C<sub>5</sub>.

5770 - 5780 LST, BN, LT BN, DS, & TR GY SH.

5780 - 5790 SH, GY, DK GY, CALC, W/TR LST. A.A.

5790 - 5800 SH, A.A.

5800 - 5830 A.A.

- 5830 5840 SH. A.A. W/ANHY, WH, MICRO SUCROSIC TEXT.
- 5840 5850 A.A.
- 5850 5860 SH, GY BLK W/SLTST VF-GRN SS, GY, SLI CALC DOL, TIGHT W/LST, LT-GY, F-XLN.
- 5860 5870 LST, GY, LT-TAN, VF XLN, SE RE-XTAL LST, M-XLN, WH, TR CALC SLTST, A. ABOVE.
- 5880 5900 LST, LT TAN, WH, BUFF, F-M-XLN, VF CUT & LIGHT FLUOR.

  (TR of this type LST) TAN. LST, GY, GY-BN, F-XLN-DS, TIGHT.
- 5900 5910 SH, DK-GY, W/SL TR LST'S A.A.\*
- 5910 5920 LST, LT TAN, WH, DS, TIGHT.

  \* Gas show at 02-04.
- 5920 5930 SH, GY-BLK, F-TEXT, SLI CALC W/ STKS LST, TAN, DS.
- 5930 5950 A.A.
- 5950 5960 A.A. & GAS SHOW @ 5954-64'.
- 5960 5980 A.A.; Gas show @ 5960-70'.
- 5980 6000 A.A. W/TR ANHY (in 90-6000 sample), WH, AND LST, GY, F-XLN; Gas show at 5975-78'.
- ANHY, WH, MIC-F-SUC. TEXT W/SE LST, GY, DS, MIC-XLN, TIGHT; TR SS, TAN-WH, F-GN, S-RDD-S-ANG, POROUS; TR SLTST, GY, CALC, TIGHT.
- 6010 6050 SH, DK BLK, SE SILTY.
- 6050 6095 SH, GY-BLK, DK BLK, A.A.
- 6095 6100 SLTST, GY, DK-GY, V. CALC, SFT.
- 6100 6105 A.A. GRADING TO LST, GY, DS, TIGHT
- 6105 6109 A.A. W/ANHYDRITE, WH, F-SUC TEXT (Top Desert Creek & circulate).
- 6110 6115 ANHY, WH, LT-GY, SE W/SPOTTY DEAD OIL STN & NO CUT OR FLUOR

- 6115 6120 SH, GRY, DK GY, TR ANHY A.A. W/SE LST, BN, M-XLN, AND SE DS-MICRO-XLN.
- 6120 6125 A.A., TR LST, LT BN-BN, DS.
- 6125 6130 LST, BN, LT-BN, DS-MIC-XLN, Gas show at 6127-28' -- 125 units  $C_1$ - $C_3$  &  $C_5$ .
- 6130 6135 A.A.
- 6135 6140 LST, BN, DS, A.A.
- 6140 6145 A.A.
- 6145 6150 (little sample) good drilling break at 6147'

  (2'/ft). Circulate out at 6153' chlorides increased from 825 @ 12:25 to 5100 ppm at 12:35; TR SALT, Clear, Translucent, F-XLN.

Total Depth 6155'

Final Geological Report Nelson 6-11 Well NE SW Section 6, T. 33 S., R. 24 E. San Juan County, Utah

For Mountain States Resources, Inc. Monte Grande Exploration, Inc. Cut Bank, Montana

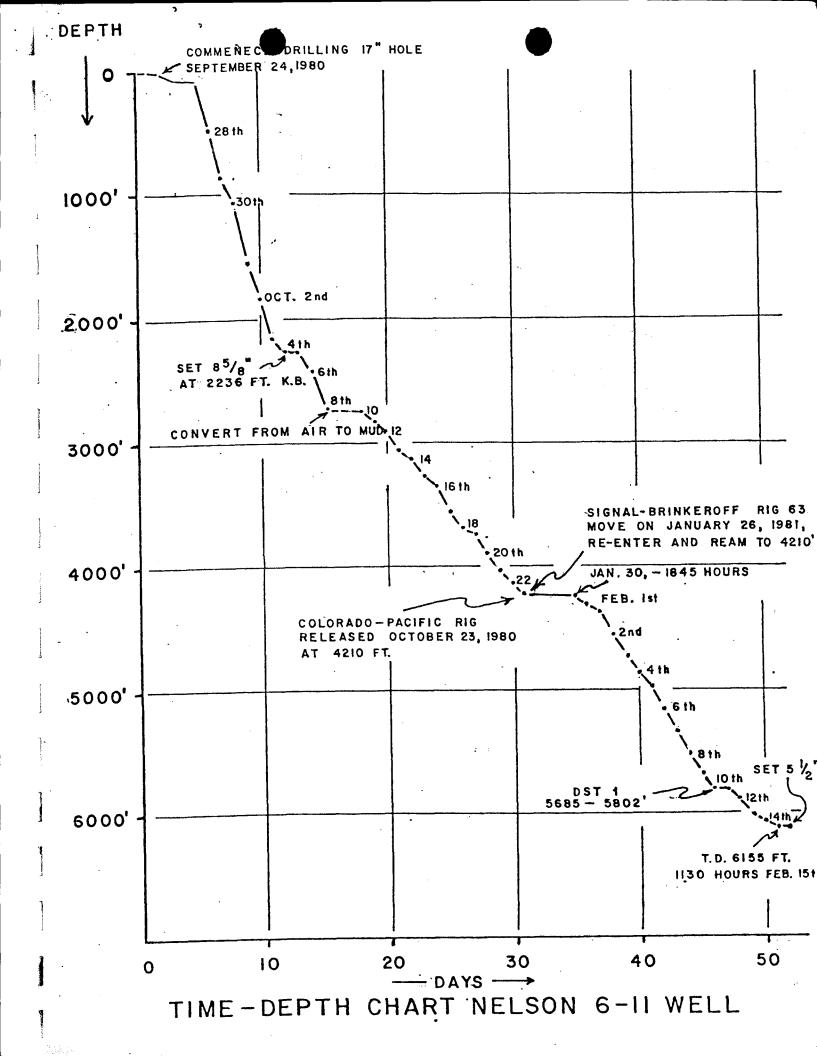
February 27, 1981

Ву Worldwide Exploration Consultants, Inc. Suite 3365 Anaconda Tower Denver, Colorado 80202

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### DAILY WELL REPORT

Nelson 6-11 (Vega Prospect)

LOCATION: NE SW Section 6, T. 33 S., R. 24 E. San Juan County, Utah

GR - 6915'

KB - '6925' (Colorado Pacific Rig 1)

KB - 6926' (Signal-Brinkerhoff Rig 63)

TD - 6000'

Report To: Weekly report to Mountain Fuel Supply Company, 300 West Arrington Street, Farmington, New Mexico 87401.

Sept. 22 - Move dry hole digger from Moab, Utah. Spud well, drilling 10' of 17" hole.

Sept. 23 - Dry hole digger broke down. Moved off location and back to Moab. Finished rigging up drilling rig.

Contractor - Colorado Pacific Drilling Company (CPD)

Rig #1 National T20.

Pump FXK 7-1/4 x 14".

Drill pipe 5000' 3½ IF, 6000' 2-7/8 IF.

16 5-3/4" drill collars

Sept. 24 - Finished rigging up, moved rig in from Delta, Colorado.
Commenced drilling 17" surface hole.

Sept. 25 - Depth 40', made 30 ' of new 15½" hole.
Bit #1 HTC OSC, AA503 made 30' in 10 hours.

Sept. 26 - 2nd day of operations.

Depth 50', made 10' in 24 hours. WOC on conductor pipe.

Bit #1 SB 15" HTC OSC in at 10', out at 50', made 40' in 14 hours. Drilled surface hole with air.

Encountered surface waters at 15'. Three compressors on hole. Mixed 7 gallons of stiff foam, 10 gallons baroid foamer. One 5 gallon can SH12L.

Set conductor pipe with 4 yards (1000# cement) from Monticello containing 3% CaCl.

Remarks: Presently WOC on conductor and drilling rat and mouse hole. Will WOC 8 hours and nipple up air package for drilling 12% hole.

24 hour summary: 14 drilling conductor hole

14 Ran 1 jt of conductor pipe

3½ Reamed hole

23 Mixed cement and cemented conductor pipe.

2½ WOC and drilled rat and mouse hole Ran 1 jt of 13-5/8" 40# J55 conductor pipe.

Overall 40.42', landed at 50'KB.

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Sept. 27 - 3rd day or operations.

Depth 54', made 4' in 24 hours. Drilling 12-1/4" hole under conductor pipe.

Bit #2 SB 12-1/4" STC 2JS. Open, no jets (button bit) in at 48', made 6' in 1-1/2 hours.

Drill string - Kelly and one 5-3/4" drill collar.

One 6-3/4" air hammer.

Three compressors on hole.

Mixed two 5 gallon corrosion inhibitor, 10 gallons baroid foam (soap).

24 hour summary: 5-1/2 WOC and drilled rat and mouse hole.

2-3/4 Nippled up cellar and rotating head.
1-3/4 Nippled up Grant rotating head

and changing head.

6-1/2 Repair rotary table and change out table.

1-1/2 Repair draw works chain 4-1/2 Nippling up compressor

1-1/4 work on light plant

1-1/2 Drilling surface hole under conductor pipe.

Sept. 28 - 4th day of operations. Depth 450', amde 4-0' in 24 hours. Drilling 12-1/4" surface hole. Bit #2 SB 12-1/4" 2JS. Open, no jets (button bit) in at 50', still in, made 400' in 20-1/4 hours. Drill string 20,000#, 10,000# on bit, 30-40 RPM. Twelve 5-3/4" drill collars plus one 6-3/4" air hammer. Three compressors and one booster. Dried up hole under conductor pipe and dusted to 78'. Hole started making water at 78', air mist drilling to 450'. Making 8-10 barrels of water/hour. Mixed 18 sx potash (KCL), two 5 gallon corrosion inhibitor, one 55 gallon foam. 24 hour summary: 22 drilling rig service

Sept. 29 - 5th day of operations.

Depth 861', made 411' in 24 hours. Drilling 12-1/4"

surface hole.

Bit #2 SB 12-1/4" STC 2JS, open (button bit) in at 50',

still in, made 811' in 43-1/4 hours.

Drill string 26,000#, 10,000# on bit, 30 RPM.

Twelve 5-3/4" OD and 2-1/4" ID drill collars.

One 6-3/4" air hammer. Total of 412'.

Four compressors and one booster on line. 375# air pressure.

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Sept. 29 - Lifting 35-40 bw/hour. Mixed one 50 gallon soap, 1400# (28 sx potash KCL) (cont.) 23 24 hour summary: drilling 3/4 riq service 1/2 work on air compressors

Sept. 30 - 6th day of operations. Depth 1073', amde 212' in 24 hours. Drilling 12-1/4" surface hole. Bit #2 SB 12-1/2" STC 2JS in at 48', still in, made 1025' in 66-1/4 hours. Drill string 26,000#, 10,000# on bit, 34 RPM. Twelve drill collars and an air hammer. Air pressure 300#. Survey: 935' - 3/4 degree On line 4 compressors, 1 booster, lifting 40 bw/hour. Mixed 31 sx potach (KCL), 2 barrels of soap, one 5 gallon corrosion inhibitor. 24 hour summary: 23 drilling 3/4 rig service 1/3

survey

Remarks: 8-5/8" surface pipe on location.

- 7th day of operations. Oct. 1 Depth 1584', made 511' in 24 hours. Drilling 12-1/4" surface hole. Bit #2 SB 12-1/4" STC 2JS in at 48', still in, made 1536' in 89-1/2 hours. Drill string 33,000#, 10,000# on bit, 35 RPM. Twelve 5-3/4" drill collars = 366', one 6" air hammer = 6.18', two XO subs = 365', total 366'. Four compressors, one booster on line. 310# air pressure, lifting 75 bw/hour. Survey: 1584' - 1 degree Mixed two barrels (110 gallons) soap, 20 sx potash (KCL), one 5 gallon corrosion inhibitor. 24 hour summary: 23 drilling 1/4 Rig service 3/4 Survey
- 8th day of operations. Depth 1839', made 242' in 24 hours. Drilling 12-1/4" surface hole. Bit #2 SB 12-1/4" 2JS (button bit) in at 48', out at 1642', made 1594' in 92-1/2 hours (bald). Bit #3 SB 12-1/4" STC 2JS (button bit) in at 1642, still in at 1839', made 191' in 16-1/2 hours. Drill string 34,000#, 10,000# on bit, RPM 36. Twelve 5-3/4" drill collars and air hammer = 366'. 24 stands drill pipe.

Daily Well Report Nelson 6-11 Page 4 - Four compressors, one booster, 375# air pressure. Oct. 2 Mixed 10 sx gel, four 55 gallon soap, one 5 gallon (cont.) corrosion inhibitor 1350# KCL. Remarks: Presently drilling with stiff foam, vis 42, lifting 100 bw/hour. 19-1/2 drilling 24 hour summary: 1/2 unload hole after trip with bit #3. 3/4 rig service 1/2 survey Survey: 1613' - 3/4 degree - 9th day of operations. Oct. 3 Depth 2184', made 345' in 24 hours. Drilling 12-1/4" surface hole with #3 bit. #3 Bit SB 12-1/4" STC 2JS (botton bit) in at 1642, still in, made 536' in 38 hours (still drilling 2-3 min/ft. Drill string 35,000#, 15,000# on bit, RPM 38. Bottom hole assembly twelve 5-3/4" drill collars and air hammer = 366. Four compressors and one booster, air pressure 425# while drilling, 575# to unload hole after connections. Drilling with stiff foam, vis 42. Mixed 10 sx gel, one 5 gallon SH1200L, four 55 gallon soap, 700# KCL, two 5 gallon corrosion inhibitor. 24 hour summary: 20 drilling 3/4 rig service 1/2 survey 2-3/4 blowing hole after connections 1925' - 1/2 degree. Survey: Due to increased water flow below 1800', now plan to drill 12-1/4" hole to approximately 2300' and set 8-5/8" surface casing to that depth. Sat. 10th day of operations. Oct. 4 Depth 2242', made 58'in 24 hrs. W.O.C. 7:AM Bit #3 SB 121" STC @JS in 1642' out 2242' (insert bit) 600' in 43 3/4 hrs. D/S 35,000#/15,000# RPM - 35-12" X 5 1/4" DC. 366' Four compressors, one booster , mud pump. 450# Hole pressure. Mixed two barrels (110) gallons soap, 2 B. Corrosion Inhibitor, 15 Sax Gel, (1500#), 20 Sax Potash (1000#) KCL). 24 hour summary: 5 1/2 drilling surface hole 1/2 rig service  $2\ 3/4$  short trip and out for casing 4 3/4 rig up and run casing - rig down. 2 3/4 nipple up . BJ and pump. 900 sax 50/50 Pox mix.

11:RM start cement in 12:RM all cement in.

7: AM woc.

1:AM plug on bottom = mix cement 2% CoC/2.

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Sun. Oct.5 7:AM

- 11th day of operations.
Depth 2242 (0) Nipple up. W.O.C. after second surface cement job.

24 hour summary: 3/4 Rig Service,

7 3/4 Nippling up B.O.P.Removing landing joints.

15% W.O.C. cement backed of 8 5/8 W/300 additional sax.

24 Hrs.

6; PM B.J. on location 6P/M ordered 300 Sax.
7: PM 150 sax plug: wait one hr.
8: PM 150 sax plug: wait on sax.
9: PM 12 sax cement off top 8 5/8.
10: PM W.O.C. to 6/PM 8 hrs. W.O.C.
6: AM nippling. Sample - top, Dakota 12',
Navaho - 1070.

Mon. Oct.6 7:AM

- 12th day of operations. Depth 2418' (176) Drilling 7 7/8 = Misting. # at 7995 #1 Bit 7 7/8 = STC = V2HJ in 2242\*-SI 2418\* 176 ' in 7 1/2 hrs. drilling. prill string  $43,000/15,000 - TRPM = 45 = 12 \times 5 1/4$ . D.C. = 366'-Notthammer: 3 X 2" 3.68' Two compressors and Booster and mist pump. Two air hands - rotating head = 350# Mixed: 1 Bbl soap = (W.A.D.) 400# potash (8Sax)= Bariod (W.A.D.), 5 gal. can corrosive inhibitor. (W.A.D.) Past 24 hrs: 5 hrs.7A/M: 1P/M" Wait on spool. nipple up. B.O.P. Wait on air head. 1P/M to 5P/M: nipple up new air head. Hook up Blower line. 5P?M to 7P/M: Trip in = unload hole test B.O.P. 7:15 to 9.15; 2 hrs. Drilling cement 30' cement in pipe Drill shoe 85/8 9.15 to 11:30 24 Blow hole and dry up hole. 11:30 to  $7A/M = 7\frac{1}{3}$  drilling with Bit #1- 7 7/8 from 2242 to 2418.

Tues. Oct.7 7:AM

13th day operations: 2716' )298) past 24 hrs. Tripping for Bit#2. Bit #1= 7 7/8 STC. V2HJ in 2242' out at 2716' 474' in 185 (Green) Bit #2 7 7/8 STC. F-3 (V3C 8115) in 2716' prill string 48,000/17,000 = 37 stands + 1 single.  $12D.C. \times 5\frac{1}{4} = 366^{\circ} - Sub.3.68$ Pump: No pump. Compressors: Three compressors and Booster + mist pump. Surveys: 2688' = 1/2. Past 24 hrs. 10 3/4 drilling 3/4 - rig service. 14 Blow hole. to attempt to dry up. 1/2/ survey @ 2688' 5 1/4 work stuck pipe @ 2600', 24 pullout 1 repair time - 24 trip W/#2 Bit.

Daily Well REport Nelson 6-11 Page 6

Wed. 7:AM

14th day operations: Oct.8/80 Depth today 2716' (0)

mixing mud: 8 stands inside pipe.

Bit#1 - 7 7/8 - V2HJ in 2242 out 2716

. 474 in 184 hrs.

Bit  $\#2 - 7 \frac{7}{8} - \text{STC} - \text{F}-3 (\#3C8115)$  in @2716!(0-0)

Drill string 36,000/ 37 stands 1 single

12 Drill collars = 366.

Pump: 4 X 7 triplex- CMC V-871=

Compressors @ 3P/M - Released.

Survey 2688 = 3

Past 24 hrs: 8; AM/2; 30PM - 64hrs. attempt to clean

out hole W/air @ 2600

2:30PM-3:30PM

3/4 hr.rig survey

1/2 hr.repair rotary line.

14 hr. wait on welder

1 hr. tripping

5 hrs. ream and wash hole.

24 mix mud.

8hrs. wait on truck.

41 hrs. mixing mud, flowline, wait on water.

3/4 hr. displace hole.

Mud mixed: 4 sodaash, 1 SX CC16, 74 gel, 10 sax Cedar

Fibre, Bariod 914.00

Thurs. Oct.9/80 7:AM

15th Day operations.

DEpth today 2716" (0) conditioning.

Depth 2600 - hole-Reaming to old Bottom 2716

Hole ok to 2600.

8:AM to midnite 1/2 hr. rig survey, 14hr. tripping

into surface pipe. Mixed mud: 49Sax Gel, 9 MS., 2 soda ash,

1CC.16 caustic lignite.

4:PM - Rig service

4:15 to 5PM - Reaming up to 2563'

5PM - 5:45PM - Mixed 10 sax gel.

5:45PM to 6:PMCirculate hole, pumped down mud.

6PM to 6:15PM - tighten clutch.

6:15 to \*; 30PM ream hole.

8;30PM to 9:15PM Mix 10 sax Gel, Visc.55.

9:15 to midnite: Ream to 2563'.

12:AM to 12:15AM R/S. - 12:15 to 12:30AM - Pull 6 stands

into surface, - 12:30AM to 2:45AM - Work on mud pump.

2:45AM to 3AM - trip into 2550.

**8**AM to 3:30AM - Ream hole, - 3:30AM to 3:45AM Pull up 6

joints of casing.

3;45AM to 4:30AM Work on pump. - 4:30AM to 8:AM Ream and condition hole.

Past 24 hrs: 14 hrs. Condition hole

4 hrs; work om pump.

l hr.tripping

5 hrs. mix mud and chemical.

Daily WEll Report Melson 6-11 Page 7

Priday Det.10/80 7:AM

16th Day operations.

Depth today 2720' (4') cleaning out to bottom.

Drill 4' Newhole.

Bit#2 - 7 7/8 STC-F-3= (BC 8115) 2716-2720 - 4FC-1 hr.

D/S: 48,000/20,000# RPM-55- 12 Drill Collars-366'

38 stands- even.

Mud mixed: Vis.75 0 WT 8.0\$W.L. 6.C/C 2/32 soft.PH:8.5

3 Sax (caustic lignite) 2 sax alum.strate- 1 sax driscose (CMM)

Past 24 hrs: 8AM to 8:15AM Rig service

8:15AM to 10:45AM Reaming 2594 |
10;45AM to 11:00AM Fix drive motor table.
11AM to 4PM - Reaming hole = 2500

8:15AM to 10:45AM Reaming 2594 '
10;45AM to 11:00AM Fix drive motor table.
11AM to 4PM - Reaming hole - 2590
4PM to 4:15PM - Rig service
4:15PM to 12AM Reaming to 2650'
12:AM to 12:15AM Rig Service
12:15AM to 6:15AM Ream and condition to 2716'
6:16 to 8AM - Drilled 4' of new hole to 2720 and run survey. Did not register.
Drilling 2720'.

Sat. Oct.11/80 7:AM

17th Day of operations.

Depth today 2844' (128) Drilling.

Bit#2 = STC. 7 7/8 F-3 in 2716'- SI2844 - 128 in 24hrs.

D/S 42,000/25,000-TRM - 45 = 12 D.C.5\; = 366'-2 X 20=3.86'

40 stands - D.P.3\; 13.6\;

Mud Vis:53:WT. 8.7\; -W.L. 7.2C/C PH.8.5

Mixed: 10 sax gel. - 1 sax Celle EX = Driscoes., 2 Soda Ash.

1 Torque trim.

Past 24 hrs: 8:AM to 8:15AM - Rig Service 8:15AM to 4PM - Drilling 4PM to 4:15PM Rig Service 4:15PM to midnite - Drilling Mid.to 12:15AM R/S. 12:15AM to 7:AM - Drilling. Daily Well Report Nelson 6-11 Page 8.

October 12, 1980 - 18th. Day of operation 7:AM Depth 2955 (111) Bit  $\#2 = 7 \frac{7}{8}$  STC=F-3 - 2714 Out 2870 154 In  $28 \ 3/4 = (600D)$ .Bit #3 = STC 7 7/8 - V2HJ (Ser. # AT 8018)(3 x 20 Jets) in 2870 - Made 85' in 14k hrs. Drill String - 46,000/25,000 RPM = 54=16DC = $5\frac{1}{4}$ " = 489.8 Bottom hole in log 493.50 39 Stands 1 Single  $4 \times X + 7 \text{ G/D} = \text{strokes per minute}$ Pump: Triple 86 = 300 # p.p.Surveys: 2714 @ \

Mud: Vis: 46 wt. 9.1 w.l. 7.2 c/2 2/32 ph. 8.0

Mixed: 13 Gel - 2 caustic lignite 2 soda ash - 1 Lime

Past 24 Hrs: Logging truck on location

Saturday: Hooked up Saturday

one man brought up unit on Friday

Drilling 15 3/4
R/S 3/4
Tripping 3 3/4
Repair Pump 1k
Pick up D/C 1 k
Circ to BTM 1

24 hrs.

October 13, 1980 19th. Day 7:AM Depth 307

Depth 3075 (120)

Bit #3 = STC - 7 7/8 V2HJ (3X20 Jets) in at 2870

S.I. 3075 = 205 = 35 1/2

Drill String - 46,000/25,000 - TRPM =62=16DC=489.80 bottom assembly DC + Subs = 493.50

41 Stands + Single

Surveys: 2714 @ 1/2°

Mud: Vis 40 W.T. 9.1# W.L. 8.1c/c F/C 2/32 PH. 8.0

Mixed: 2 Soda Ash - 2 Caustic Lignite 10 Sax Gel

Past 24 Hours: 1 man logging unit:

3/4 R/S

21 1/4 Drilling

l Mix Mud

Repair Flow Riser
Hrs.

Mell Report 6-11

20th. Day of Operation
Depth 3157 (82)
Bit #3STC 7 1/8" kHJ (3X20Jets) in @ 2870, out @ 3109=
237 in 41½ (Quill)
Bit #4.(R/R#2) 7 7/8 STC = F=3-3109, still in, 3157=
48' in 9 Hrs., 154' in 283/4 Cumalutive 202' in 37 3/4hrs.
Drill string 46,000#,25,000# 60 RPM. 16 drill collars=
5 1/4X28'=489.8' Bt= 493. + 43 Stands Surveys: 2714 @ %
Mud Vis: 47 Wt: 9.0# W.L. 6.8 a/c 2/32 Ph. 8.5

Nixed: (cc 16) 1 Sax Caustic Lignite 42 Sax Soda Ash 12 Sax pot ash

Past 24 Hrs.: 16 3/4 Drilling = 9 hrs. #4

3/4 R/S

1/4 Survey

3 3/4 Trip out #3 in #4

1/4 Circ for Trip.

2 3/4 Washed & Reamed to Bottom 2625 to 2718 = 100'
went o.k. to 3090
24 hrs. to 3110

Wed. Oct.15

7:AM

21st Day of operation
Depth 3335' (178')
Bit #4(RR32) 7 7/8 STC. F3J = 3109 SI 3335'
made: 226' in 33 Hrs, cumolative: 380' in 61 3/4 Hrs.
Drill String 48,000/27,000#TRPM. 60 =
16 Drill Collars 5½ X 2½ = 489.8'
Bottom hole assembly = 493' + 46 stands of Drill pipe.
Surveys 2714 @ 1/2°

Mud: Viscosity 43 - WT 9.2# W.Loss 5.6 c/c Fc.2/32 Ph.8.5
Mixed: 3 Sax Soda Ash - 2 Sax Caustic lignite
10 Gel, 1 Sax Driscose.
Past 24 Hrs: 3/4 Rig Service
234 Drilling. 7.4 Min. per foot drilling time.

Churs. Set.16/80

22nd Day of operation Depth 3433' (98) Drilling Bit#4(RR#2) 7 7/8STC. - F3J - 3109 SI 3433\* Made 324 in 774 Hrs. Cumalitive Total 478 in 28 3/4 Hrs. D/S: 49,000/30,000 TRPM= 52. 16 Drill collars  $5\frac{1}{4}$  X  $2\frac{1}{4}$  = 489' Bottom 493 + 47 Stands. Survey =  $27\frac{1}{4}$  @ 1/2 ° Mud: Vis. 50 WT.9.2#, W.L. 6.8 c/c, Filter cake 2/32 PH.8.0 Mixed: 14 Gel - (CCl6) Caustic lignite 1 Sax. , 2 Sax Soda Ash. 2 Sax Driscose -3/4 Rig Service Past 24 Hrs: 144 Hrs. Drilling 1 3/8 Trip out 3/4 Hr. Circulate hole. 3 ½ Mix mud. 3 3/4 hr. Repair mud pump. 24 Hrs. Total.

Priday Oct.17/80 7:AM

23rd Day of Operation
Depth 3585' (152) Drilling
Bit #4, 7 7/8STC, F#J in 3109' SI. 3585' (3 X 4)jets
476' in 67 Hrs. Cumulative 154' in 28 3/4 Hrs. = 630'
in 97 Hrs.
D/S: 52,000/34,000 TRPM = 55 . Drill Collars 16 5\DC=489
Bottom 2 X 4.93 = 50 stands Drill pipe.
Surveys: 2714 @ 1/2 = 3109 3/4°.
Mud: Viscosity 42, WT. 9.1#, Water loss 6 c/c 2/32, Ph 8.
Mixed: Driscose 2 Sax, 3 Soda Ash, 34 Gel.
Past 24 Hrs: 3/4 Hrs. Rig Service
193/4 Hrs. Drilling
1 3/4 Hrs. Work on pump-Rod packing
1 3/4 Hrs. mix mud.
24 Hrs.

Sat. Oct.18/80 7:AM

24th Day of operation
3729' (144) Drilling
Bit #4(7 7/8RR#) STC-F3J in 3109 = SI 3729'
Made 620' in 89 3/4 Hrs.(3X4 jets)
Cumaltive: 154' - 774' in 118½ Hrs
D/s: 54.000/30,000 TRRM - 55-D/C= 16 X5½+489
Bottom 493' 5+5 Stands + 1 single
Pump Triplex 4½ " X 7" = 85 strokes = Pressure 300#
Surveys: 3109 C 3/40
Mud V1s: 45 WT 9.2 W.L. 5.8 c/c F/C 2/32 Ph9
Added: 2 Soda Ash - 2 Caustic lignite - 20 Gel 1 sax Driscose
Past 24Hrs. 3/4 Rig/Ser.
21 3/4 Drilling
1 1/2 Mix mud: Dump Tanks

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Sunday
   Oct.19/80
               25th Day of operation.
               3816 € (86) Drilling with Bit #5
    7:AM
               Bit#4 (RR#2) STC- 7 7/8 - F3J in 31091
               Out 3760'
                    651 ' in 954 Hrs.
               Cum. 154 = 28 \frac{3}{4} \text{ Hrs.} 805 in 124 \text{ Hrs.R.S.}
               Bit #5 - 7 7/8 STC - F-3 (#BE 1039) in 3760'
              (3 X 14 jets) SI. 3816 - 56 on 10 3/4 hrs.
               Pump: Triplex 4 1/2 X 7' X 86 strokes X 300#
               Surveys: 3760 C 910 Mud Vis: 45 WT 9.2 W.L. 6.2 C/C
               6:AM check: F/C 2/32° PH.8.5
               Added: 24 - 3 Sax Soda Ash, 3 Sax Caustic lignite (C.C.16)
               Past 24 Hrs: 3/4 Hrs. Rig Service
                             16 Hrs. Drilling
                             1/2 Hr. Survey
                             4 3/4 tripping
                             1 Hr. circulate hole for trip.
                             1 Hr was to bottom.
               Water: Van: lots of mud, water tank full, Fuel every 5th
               Dat. Tripped yesterday afternoon.
Monday
oct. 20/80 26th Day of operation.
               3945' (129) Drilling 195 hrs.
   7:AM
               Bit #5- STC 7 7/8 = F3J - 3760' SI 3945'
               Cumaltive 185° in 30 1/4 Hrs.
               D/S = 58,000/30,000 \text{ RPM} = 55 = 16 \text{ X } 54"DC = 489
               BTM = 493'.50 X 55 stands = 1 single
               Pump: C/D = 4\frac{1}{2} \times 7" = 85.5 \text{ PM} = 300 \#
              Mud Vis: 50 = W.T. 9.2# WL 8.0 FC 2/32 PH 11.5
              Mixed: 2 Soda Ash, 2 Caustic lignite, 1 Driscose= 20 Gel:
              Survey 3760 @ 10 Past 24 Hrs.
                                   3/4 Hrs. R/S.
                                  195 Drilling
                                  2 3/4 work on pump
                                 2 liner packing washed out.
                                  1 Hr. mix Mud.
  Tues.
               27 Day of operation
  Oct.21/80
               4,055' (110') Drilling 144Hrs.
    7:AM
              Bit #5 STC. 7 7/8 Size, F-3 in 3760' still in.
              Footage 295' in 44' hrs.
              Wt.9.2, Vis 60, WL. 8.0 FC 2/32nd
              PP. 300#, String W.56,000' Wt. on Bit 30,000, strokes 85
              Liner Size 44.
              Mud mixed: 2 Sax Celex, 3 caustic, 3CC-16, 3 soda ash.
              57 stands and 1 single.
              Past 24 Hrs.
                                 Mix mud hr.
                                 stuck in hole 1 3/4 hr.free now.
                                 Rot. Hrs. 144 Hrs.
                                 Trpg. Hrs. 2.
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Rpr. Hrs. Changed wash pipe packing 1 3/4.

Work on pump. 3 hrs.

Wed. Oct.22/80

7:AM

26 Day of operation.

4201' (146) past 24 Hrs.

Bit #5-F3J in 3760' out 4201' made 441' in 65 3/4Hrs.

Drill string 60,000 /30,000-RPM 55- 16 54 Drill collars.

Pump: triplex 44" by 85 strokes.

300# PUmp pressure, there is problem, pump to small can-

not clean out as it should.

Mud: Vis.48-WL 8.3-WT. 9.6 2/32 FC.Phll, Added 20S.A.-2CL.2S.2Dris.

Status: Condition mud to shut down operations, rig has

reached capacity. Cannot drill depper, shutting down and moving small rig off location.

Waiting for bigger rig to drill total depth.

Past 24 Hrs:

3/4 Hrs. Rig service.

214 Hrs. Drilling

2 Hrs. working stuck drill pipe.

hurs.

anuary 22, 1981 - RESUME OPERATIONS

27th Day of Operation

Urado Construction moving D-7 Cat to location to enlarge pad for Brinkerhoff Rig #63 to move on Monday Jan. 26/81.

riday

an. 23/81

28th Day of Operation

Charlie Lancaster, Pusher of Rig #63, meeting with Urado

Construction at location - need to enlarge pad.

at & Sun.

29th & 30th Day of Operation

an. 24 & 25/81 Waiting on Brinkerhoff Rig #63 to come from Davis location

at Bluff, plugging and abandoning hole. Rig released to

MSR at midnight Jan. 25/81/

onday

an. 26/81

31st Day of Operation

Brinkerhoff-Signal Rig #63 moving on - five loads on location

at 2:PM - eight loads enroute.

32nd day of Operation

uesday an. 27/81

Work on derrick with welder - raise mast - haul water - install

dead men - install BOP. (Brinkerhoff - 1st Day)

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4200' (0) (Brinkerhoff - 2nd Day)

an. 28/81

Finish rigging up - Ream out rathole - prepare to drill.

hurs. - 7:AM

an. 29/81

33rd Day of Operations (Brinkerhoff - 3rd Day)

4210' (0)

Running in the hole with Drill Collars and Pipe.

Past 24 Hours:

3 Hrs. Mixing Mud - 30 Sax Gel

4 Hrs. Reaming Rat Hole & Set Sock

1 Hrs. Drill Mouse Hole & Set Sock

1/2 Hr. Mud Loggers on Location.

8 Hrs. Set BOP with new spool and set up.

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Jan. 29/81 - Cont -
                2 Hrs. Wait on Welder to weld flowline.
                1 Hr. Picking up Drill Collars - 565' (18 D.C.) in hole.
                4 Hrs. Pipe in hole 800'.
                Bit - 7 7/8" STC - DGT-J (Bit #6)
Friday - 7:AM
                                                  (Brinkerhoff 4th Day)
                34th Day of Operation
Jan. 30/81
                4210' T.D. - (Cleaned out to 2,078')
                Bit #6 - DGT-J - BJ 1397 (Reamed out 466' in 17 Hrs.)
                D. S. 64,000/10,000 = RPM 45
                Pump: D375 = 5' \times 14' \times 68 Strokes = 900#
                Mud: Viscosity 76 = Wt. 9.3 WL 7.2 c/c PH 9.5. Added 61 Gel; 6 Caustic;
                6 Soda Ash; 6 Caustic Lignite; SPA 5 Sax; CMS 5 Sax.
                Past 24 Hours:
                6 Hrs. Picking Up Drill Pipe & Measure in 2582.
               11 Hrs. Circulate Hole and Mix & condition mud to 2613'
                7 Hrs. Reaming to 2,708'
Saturday - 7:AM
                                            (Brinkerhoff 5th day - 1st day Dlg.)
                35th Day of Operations
Jan. 31/81
                4280' (80')
                Drilling new 7/78" Hole
                Bit #6 - STC 7/78" BJ 1397 (In 2242 Reamed to 4200' 28 3/4 Hrs)
                                            Drlg. 4200-4280 in 91 Hrs.
                D.S. 84,000/35,000 = RPM 60
               Pump: D375 = 5" x 14" x 66 = 1050#
               Mud: Viscosity 75 = Wt. 9.2# WL 5 c/c 2/32 ph 10. Added 9 Sax Gel 1 SPA
               Past 24 Hours
               121 Hrs. Reamed & Conditioned Hole
               1/4 Hr. R/S
               11 Hrs. Circulate & Cond. on Bottom
               101 Hrs. Drilling.
Sunday - 7:AM
               36th Day of Operation
                                                  (Brinkerhoff 6th day - 2 Days Dlg.)
Feb. 1/81
               4387' (107')
               Drilling with Bit #7 - STC 7 7/8" F3-J ( 3x11 jets) In 4301' SI 4387'
                                                                     Made 86' in 10 3/4 Hrs.
                              Bit #6 - DGT-J - In 4200 Out 4301 Made 101' in 131 Hrs.
               D.S. 86,000/35,000 - RPM 45 = 18 \times 6" \times 2\frac{1}{4} - Total 525
               Pump: D375 = 5" x 14" x 66 Strokes = 1000#
               Mud: Viscosity 47 = Wt. 9.7# W.L. 6 c/c 2/32 PH. 11 (Added 1 Caustic Lignite
                                                                                1 SPA
               Survey: 4301' - 0°
               Past 24 Hours:
               17 3/4 Hrs. - Drilling
                7 1/4 Hrs. - Tripping
                  1/4 Hr. - Survey
                          - Repair Diagraph on Cathead.
                  1/2 Hr. - Break - Circ. on Bottom
                  1/4 Hr. - R/S
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37th Day of Operation
                                                      (Brinkerhoff 7th Day - 3 Days Dlg.)
                4547' (160')
                Bit #7 STC 7 7/8" F3-J (In 4301' SI 4547') 246' in 321 Hrs.
                D.S.: 88,000/35,000 - RPM 45 (18 x 6" DC - 525')
                Pump: D375 = 5" x 14" x 65 Strokes = 1000# Pump Pressure
                Mud.: Viscosity 45 = WT. 9.5# W.L. 5 c/c 2/32 ph 11. Added 25 Gel; 3 Sax CLS;
                3 Soda Ash and 3 Sax SPA
                Survey: 4301' - 0'
                Past 24 Hours
                21 3/4 Hrs - Drilling (160' in 21 3/4 Hr. = 7.56 ft. per hr.)
                   3/4 Hr. - Circ. Samples @ 4491'
                   1/4 Hr. - R/S
                 1 1/4 Hrs.- Rig Repair (New Rotary Chain - New Valves in Pump)
          - 7:AM
                 38th Day of Operation
                                                     (Brinkerhoff 8th Day - 4 days Dlg.)
                4736' (189')
               Bit #7 STC 7 7/8" F3-J (In at 4301' SI at 4736" (435' in 51\frac{1}{2} = 8.4)
               D.S.: 90,000/35,000 - RPM 45 (18 x 6" x 2\frac{1}{4} = 525)
               Pump: D375 = 5" x 14" x 64 strokes = 1000# P.P.
               Mud: Viscosity 42 = WT. 9.4# W.L. 8.6 c/c 2/32 ph. 9.5 (Added 15 Gel; 3 CLS'
               2 Caustic Soda; 2 Soda Ash; 1 SPL Survey: 4301' - 0
               Past 24 Hours:
               21 1/4 Hrs. - Drilling
                1 3/4 Hrs. - Circ. Samples - 4632 & 4675
                  1/4 Hrs. - R/S
                  3/4 Hrs. - Repair - D.W. Motors quit--Repair air lines.
 Wednesday - 7:AM
                                                    (Brinkerhoff 9th Day - 5 Days Dlg.)
               39th Day of Operation
               4865' (129')
              Bit #7 STC 7 7/8" F3-J (In 4301' SI 4865'- 564' in 741 Hrs. (3 x 11 jets) 7.5/hr.
              D.S.: 90,000/35,000 - RPM 45 (18 x 6" x 2\frac{1}{4} = 525')
              Pump: D375 = 5^{\circ} x 14" x 69 Stks = 1150# PP
              Mud: Viscosity 41 = WT. 9.4# W.L. 6.2 c/c 2/32 ph 9.5 (Added 25 Gel; 4 CLS;
              1 Soda Ash; 3 SPA; 3 Cuastic Soda; 3 Lignite Survey: 4301' - 0 4812' - 1
              Past 24 Hours
              20 1/2 Hrs. - Drilling
                 1/2 Hr. - Survey @ 4812'
                 1/2 Hr. - R/S
               2 1/2 Hr. - Rig Repair (Change Gaskets, Packing in Pump, Mechanic adjusting
                                                                              pump motors.
Thursday - 7:AM
Feb. 5/81
               40th Day of Operation
                                                   (Brinkerhoff 10th Day - 6 days Dlg.)
               4990' (125') - Drilling with Bit #8
              Bit #7 STC 7 7/8" F3-J (In 4301' - Out 4887' - 586' in 76 3/4 hrs.)
              Bit #8 STC 7 7/8' F2-J SN#BK1936 (In 4887' SI 4990'= 103" in 14 hrs. - 7.3f/p/h/)
              D.S.: 97,000/35,000 - RPM 45 (18 x 6" x 2\frac{1}{4} = 525)
              Pump: D375 = 5" x 14" x 70 strokes = 950# PP (Jets 3 x 13)
              Mud: Viscosity 43 = WT. 9.4# W.L. 6.4 c/c 2/32 ph. 9 (Added 10 Gel; 2 SPA;
              2 Sax CLS; 2 Lignite; 2 Caustic; 2 Soda Ash)
              Survey: 4812' - 1
                                         Past 24 Hours
                                         16 3/4 Hrs. - Drilling
                                          6 1/2 Hrs. - Round Trip
                                            3/4 Hrs. Circ. Samples @ 4887
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41st Day of Peration (11th day - 7 days Dlg
               5193' (203')
              Bit #8 STC 7 7/8" F2-J SN#BK1936 (In 4887' SI 5193' - 306' in 36\frac{1}{2} = 8.4 f/p/h)
               D.S.: 98,000/35,000 RPM 45 (DC 17 \times 6" \times 21 = 525)
               Pump: D375 = 5" x 14" x 70 strokes = 950# PP (Jets 3 x 13)
               Mud: Viscosity 38 Wt. 9.3# W.L. 6 c/c 2/32 ph. 9.5 (Added 15 Gel; 5 Lignite;
               2 SPA; 4 CLS
               Survey: 4812' - 10
               Past 24 Hours
              '22 1/2 Hrs. - Drilling
                1 1/2 Hrs. - Circ. Samples - 5028 & 5057
                                        Brinkerhoff
 laturday - 7:AM
               42nd Day of Operation (12th day - 8 days Dlg.)
Pab. 7/81
               5353' (160')
              Bit #8 STC 7 7/8" F2-J SN#BK1936 (In 4887' SI 5353 - 466' in 60\frac{1}{4} = 7.7 f/p/h/)
              D.S.: 100,000/35,000 RPM 45 (DC 18 x 6" x 2\frac{1}{4} = 525)
              Pump: D375 = 5" x 14" x 70 strokes = 950\# PP (Jets 3 x 13)
              Mud: Viscosity 38 WT. 9.2# W.L. 6.4 c/c 2/32 ph. 9 (Added 10 Gel; 3 Soda
              Ash; 3 Caustic Soda; 3 SPA; 5 CLS; 6 Lignite)
              Survey: 4812' - 1° 5354' - 1
               Past 24 Hours
               23 1/4 Hrs. - Drilling
                  3/4 Hrs. - R/S 7 Survey
                                                     (5400' Noon)
Sunday - 7:AM
                                        Brinkerhoff
Peb. 8/81
              43rd Day of Operation (13th Day - 9 days Dlg.)
               5535' (182')
              Bit #8 STC 7 7/8" F2-J (In 4887' SI 5535' - 648' in 83½ hrs. = 7.8 f/p/h)
              D.s.: 102,000/38,000 - RPM 45 (18 DC = 525)
              Pump: D375 = 5" x 14" x 70 strokes = 950 \# PP (Jets 3 x 13)
              Mud: Viscosity 38 WT. 9.3# W.L. 5 c/c 2/32 ph. 10 (Added 27 Gel; 3 Soda;
              6 CLS; 3 SPA; 9 Lignite
              Surveys: 5334' - 11
                                                     5:PM - Dlg. 5614'
                                                     2' Break 5584-85 = 4 mins. = 70 Units
              Past 24 Hours
                                                              5586-87 = 4 \text{ mins.} = 70 \text{ Units}
               23 3/4 Hrs. - Drilling
                                                                   (Methane, Ethane, Propane)
                  1/4 Hrs. - R/S
                                                     5640' Lost Volume
Monday - 7:AM
                                        Brinkerhoff
Feb. 9/81
              44th Day of Operation (14th Day - 10 days Dlg.)
              5705' (170')
              Bit #8 STC 7 7/8" F2-J (In 4887' SI 5705' (818' in 1061 hrs. = 7.7 f/p/h/
              D.S.: 105,000/38,000 RPM 45 (18 DC = 525)
              Pump: D375 = 5" x 14" x 70 strokes = 1000# PP (Jets 3 x 13)
              Mud: Viscosity 40 WT. 9.2# W.L. 5 c/c 2/32 ph. 9.5 (Added 10 Gel; 6 Lignite;
              3 Drispak; 6 CLS = 3 cans Cl6-60 (anti-corrosion); 2 Caustic; 1 SPA
              Surveys: 5334' - 11
              Past 24 Hours
                                                     5640' Lost Volume
              23 3/4 Hrs. - Drilling
                 1/4 Hrs. - R/S
Tuesday - 7:AM
                                     Brinkerhoff
               45th Day Operations (15th Day - 11 Dlg.)
Peb./81
                                                          Running DST #1 in Upper Ismay
               Bit #8 STC 7 7/8" F2-J (In 4887' - Out 5802' (915 in 119] = 7.6 f/p/h/
                                                                       Condition - Dull-651)
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Cont---

Brinkerhoff

```
eb. 10/81 - Cont--
        D.S.: 105,000/38,000 RPM = 45 (18 DC x 6" x 2½ x 28 = 525)
        Pump: D375 = 5" x 14" x 70 strokes = 1000# PP (Jets 3 x 13)
        Mud: Viscosity 40 WT. 9.2# W.L. 4.2 c/c 2/32 ph. 9 (Added 12 Gel; 4 Lignite;
        1 CLS; 2 Drispak; 1 Caustic
        Survey: 5334' - 110
                              5802' - 1/4°
        Past 24 Hours:
        12 1/4 Hrs. - Dlg. (to 6:PM)
         6 3/4 Hrs. - 1 Short Trip 1 3/4 hrs.
           1/4 Hrs. - Survey
                    - Circ. Before, short trip 1 Hr. After, short trip 1 Hr.
         2 Hrs.
           1/4 Hrs. - R/S
         2 1/2 Hrs. - Jetted Pits & Cleaned Tanks
                     DST #1 - 5685' to 5802' - 117' Interval
                     Running 2 Long Packers - Jars
inesday - 7:AM
                                   Brinkerhoff
. 11/81 46th Day of Operations (16 Days - 11 Drilling)
        5802' (0')
        Bit #7 (rerun - 586' in 76 3/4Hrs. Fair Cond. Back In @ 5802')
        D.S.: 10,500/38,000 45 RPM (18 DC x 6" x 2' Junk Sub = 527) (84 Stands + single)
        Pump: D375 = 5" x 14" x 70 strokes = 1000# PP (3 x 13 Jets)
       Mud: Viscosity 41 WT. 9# W.L. 6.7 c/c 2/32 ph. 9 (Added: 27 Gel; No Chemicals)
        Survey: 5802' - 1/4
       Past 24 Hours:
        9 3/4 Hrs. - Trip In & Trip Out DST #1
                                                                  DST#1
             Hrs. - Testing DST #1
                                                         Int. 1st Packer
                                                                           2nd Packer
```

2 1/4 Hrs. - Work Tester to Bottom 5676 5685 5802 1 1/4 Hrs. - Mix Volume Lost to Reserve Pits 117' Interval Hrs. - Pickup and Make up Tool Tool opened with weak blow: 2 1/4 Hrs. - Break Down and Load Off bottom bucket 1 Min 2 3/4 Hrs. - Check Cellar & Hookup Jet 9# on 1/4" = 5 mins.Hrs. - Running with Bit 18# on 1/4" = 10 mins.18# on 1/4" = 15 mins.17# on 1/4" = 20 mins. GTS to 1/4" 25 mins. = 22MCF Sweet Gas to Flare - Did Burn 17# on 3/16 = 30 mins 13MCF18# on 3/16 = 30 mins- 14 MCFI.F. 30 mins. I.S.I 30 mins.

3 Hrs. (Rec'd 900" of Sl. gas cut, water mud. Appears to be Drilling Mud,

not salty.)

I.H.P 2716

I.F. 227-263

I.S.I. 323

F.I.S.I. 323

2nd Flow 291-312

F.S.I. 60 mins.

60 mins.

F.S.I. 354 F.H.I. 2716

2nd

```
47th Day of Operations ( 17 Days - 12 Drilling)
 Bit #7 - Rerun In 5802' S.I. 5900' = 98' in 15 Hrs.
                                 Cum. 586'
                                               76 3/4
                                       684' in 91 3/4 Hrs.
 D.S.: 107,000/38,000 45 RPM - 18 DC + Junk Sub
 Pump: D375 = 5" x 14" x 70 = 900# PP (527' - 3 x 13 Jets)
 Mud: Viscosity 44 WT. 9.1# W.L. 7 c/c 2/32 ph. 9 (Added: 42 Gel; 16 Lignite;
 14 CLS; 3 Drispac; 6 Caustic; 3 Soda Ash
 Survey: 5802 - 1/4°
 Past 24 Hours:
 15 Hrs. - Drilling
  1 1/2 Hrs. - Trip In with Bit #7
  1 1/2 Hrs. - Hook up Cellar Jet.
  4 1/2 Hrs. - Mixing Mud
  1 1/2 Hrs. - Break Circ. & Clean to Bottom
                        Brinkerhoff
 48th Day of Operations ( 18 Days - 13 Drilling)
 6028' (128')
Bit #7 - Rerun In 5802' S.I. 6028' = 226'
                                             in 37\frac{1}{2}
                                 Cum
                                       586'
                                             in 76 3/4
                                       812'
                                             in 114 1/4 Hrs.
 D.s.: 110,000/38,000 \text{ RPM } 45 = 18 DC + Junk Sub
PumP: D375 = 6 x 2\frac{1}{4} x 30 x 2 = 527
Mud: Viscosity 50 WT. 9.1# W.L. 5.2 c/c 2/32 ph. 9 (Added 34 Gel; 1 Soda
Ash; 5 Sax CLS; 8 Sax Lignite; 2 Sax Caustic)
Survey: 5802 - 1/4°
Past 24 Hours:
22 1/2 Hrs. - Drilling
                                   6000'-6010' - Third Gas Kick--Lower Ismay
   1/4 Hrs. - R/S
 1 1/4 Hrs. - Jetting Cellar
                        Brinkerhoff
49th Day of Operations (19 Days - 14 Drilling)
6075' ( 47')
                               Running Logs: Induction Log Run
Bit #7 (Rerun STC 7 7/8" F3-J ) In 5802' Out 6075' = 273' in 43} Hrs.
        (SN#BF9396)
                                                        586' in 76 3/4 Hrs.
                                               Cum.
                                         Total on Bit 859 in 120 Hrs. - 7.16f/p
D.S.: 110,000/38,000 45 RPM - 18 DC + Junk Sub
Pump: D375 = 5" x 14" x 70 strokes = 1000# PP - Total Bottom Hole - 527
Mud: Viscosity (5:PM last night) 56 WT. 9# W.L. 6.7 c/c 2/32 ph. 8.5 (Added
46 Gel; 2 Soda Ash; 4 CLS; 8 Caustic; 4 Drispac; 1 Cl-660.
Survey: 6075 - 3/4
Past 24 Hours:
5 3/4 Hrs. Dlg. to 6075'
4 1/2 Hrs. Circ.
4 3/4 Hrs. Short Trip out of Hole
  1/4 Hrs. Survey to 6075'
  1/2 Hrs. Repair Hydromatic
     Hrs. Logging
  1/4 Hrs. R/S
```

Brinkerhoff

Brinkerhoff

of Operations ( 20th Day - 15 Drilling)

(46') Drilling

RR STC 7 7/8" F3-J SN#BF9396 - In 5802' SI 6121' = 319 in 50 Hrs.

586' in 76 3/4 Hrs

Cum. 905' in 126 3/4 H

110,000/32,000 45 RPM - 18 DC = 525

 $\mathbf{p375} = 5$ " x 14" x 70 strokes = 900# PP (3 x 13 Jets)

Viscosity 48 WT. 9# W.L. 8.6 c/c F/C 2/32 ph. 9 (Added: 1 Drispac; Ash; 1 CLS; 3 Caustic; = \$420.00 (Total Mud to date, \$14,268.00)

6075' - 3/4°

1. 24 Hours:

Hrs. - Drilling

Hrs. - Short Trip

1/2 Hrs. - Welding on 8 5/8"

3/4 Hrs. - Circ.

Hrs. - Logging & Work on Tool

#### Brinkerhoff

pays of Operations ( 21st Day - 16 Drilling)

Laying down Drill Pipe - Prep. to Run 5½" Casing land 147 jts. of 5½", 17# Production Casing. Overall measurements of casing run in hole - 6159'. Casing landed on bottom at 6155' K.B.. Cut off last jt. and landed in slips.

Ran 1 B.J. Float Shoe, measuring 1' .69", and 8 B.J. 51 Centralizers,

at 6100', 6000', 5900', 5800', 5700', 5600', 5500' and 5400'.

Cemented casing with 150 sax of 50/50 POZ mix cement, and 15% Salt.

Past 24 Hours: - 6155' T.D. ... Made 34' past 24 hours.

5 Hrs. - Drilling to 6155'

g Hrs. - Tripping out for logs - Trip in to circ. & lay down pipe(4] Hrs.ea)

Hrs. - Running Density Neutron Logs after waiting for second truck to come from Farmington.

6 Hrs. - Laying down drill pipe (24 hr. period to 7:AM Monday Feb. 16/81)

# Report for Monday - Feb. 16/81 - 7:AM to Feb. 17/81

2 Hrs. - Laying down Drill Collars & racking pipe tubs. (7:AM to 9:AM)

6 Hrs. - Rig up and run 147 jts. of 51" Prod. Casing (9:AM to 3:PM)

1 Hr. - Circ. & Work pipe on bottom (3:PM to 4:PM)

1 Hr. - Nipple up B. J. Cement Wagons, pump 15 Bbls. water ahead, followed by 500 Gals. mud flush, cementing with 150 Sax 50/50 POZ and 15% Salveling down at 4:50 PM - Monday, Feb. 16/81. Bumped plug with 800#. Released pressure, float shoe held, repressured to 800# and shut-in casing.

2 Hrs. - WOC to 7:PM. Cut 5½" casing, removed 14' piece from cellar. Set casing in slips before cutting loose.

2 Hrs. - Remove BOP and stripped cellar (7:PM to 9:PM) RIG RELEASED 9:PM - Feb. 16/81.

#### REMARKS:

Will move Brinkerhoff Rig off location later this week.
Will locate Completion Rig for Completion Program, to follow.
Plan to perforate, acidize, and test all zones having shows,
starting with the Desert Creek, at the bottom, and working up
the hole to test all gas shows in the Ismay Formations. Completion
Program to follow, when Completion Rig available.

## DOCKY MOUNTAIN GEO-ENG! BENING CO.

GRAND JIMARTON COLORADO UM A

WELL SITE GEOLOGY - MUD LINGGING.

2450 CNEUSTRIAL BLVD.

FHOME 242 Side

February 19, 1981

Mountain States Resources, Inc. P. O. Box 176 Cut Bank, Montana 59427

#### Gentlemen:

Enclosed is the final log on the Nelson 6-11 well located in Section 6, T33S, R24E, San-Juan County, Utah.

We appreciated the opportunity to serve you. If we can be of any further assistance in the final evaluation of zones encountered, please feel free to call on us.

Sincerely,

Robert L. Wright

President

RLW/jaf

Encl: 2 logs

XXC: Wexpro Company, Farmington, N.M. - 2;

Worldwide Exploration Consultants, Denver - 2

RECEIVED

FEB 2 3 1981

MOUNTAIN STATES RESOURCES, INC.

WELL NAME: NELSON 6-11

ELEVATION: 6915' KB 6926"

COMPANY NAME: MOUNTAIN STATES RESOURCES, INC.

SECTION:

NESW 6

LOCATION: T33S R24W SAN JUAN CO. UTAH

CONTRACTOR: BRINKERHOFF-SIGNAL

RIG 63

13 FEBUARY 1981

SPUD DATE:

T.D. DATE

			F	RD .						. FT PER/DAY			
6 HTC DGTJ 4200 101 13 1/4 7.62 1/30/81 4200	RUN	MAKE	TYPE	IN	FTG	HRS	FT/HR	DATE .	MDNT DEPTH	FT	DATE	MDNT DEPTH	FT
8 STC F2 4887 915 119 1/2 7.66 2/ 1/81 4332 104  RR7 STC F3 5802 353 53 3/4 6.57 2/ 2/81 4491 159  2/3 /81 4699 208  2/4/ 81 4837 138  2/ 5/81 4938 101  2/ 6/81 5151 213  2/ 7/81 5315 164  2/ 8/81 5501 186  2/ 9/81 5662 161  2/10/81 5802 0  2/11/81 5802 0  2/12/81 5856 54  2/13/81 6009 153  2/14/81 6075 66  2/15/81 6110 35				4200	101	13 1/4	7.62	1/30/81	4200				
RR7 STC F3 5802 353 53 3/4 6.57 2/ 2/81 4491 159  2/3 /81 4699 208  2/4/ 81 4837 138  2/ 5/81 4938 101  2/ 6/81 5151 213  2/ 7/81 5315 164  2/ 8/81 5501 186  2/ 9/81 5662 161  2/10/81 5802 140  2/11/81 5802 0  2/11/81 5805 54  2/13/81 6009 153  2/14/81 6075 66  2/15/81 6110 35	7	STC	F3	4301	586	76 3/4	7.63	1/31/81	4228	28			-
2/3 /81 4699 208  2/4/ 81 4837 138  2/ 5/81 4938 101  2/ 6/81 5151 213  2/ 7/81 5315 164  2/ 8/81 5501 186  2/ 9/81 5662 161  2/10/81 5802 140  2/11/81 5802 0  2/12/8 5856 54  2/13/81 6009 153  2/14/81 6075 66  2/15/81 6110 35	8	STC	F2	4887	915	119 1/2	7.66	2/ 1/81	4332	104			
2/4/ 81 4837 138   2/5/81 4938 101   2/6/81 5151 213   2/7/81 5315 164   2/8/81 5501 186   2/9/81 5662 161   2/10/81 5802 140   2/11/81 5802 0   2/12/81 5856 54   2/13/81 6009 153   2/14/81 6075 66   2/15/81 6110 35   2/15/81 6110 35	RR7	STC	F3	5802	353	53 3/4	6.57	2/ 2/81	4491	159			
2/ 5/81 4938 101 2/ 6/81 5151 213 2/ 7/81 5315 164 2/ 8/81 5501 186 2/ 9/81 5662 161 2/10/81 5802 140 2/11/81 5802 0 2/12/81 5856 54 2/13/81 6009 153 2/14/81 6075 66 2/15/81 6110 35					٠.			2/3 /81	4699	208			
2/6/81 5151 213   2/7/81 5315 164   2/8/81 5501 186   2/9/81 5662 161   2/10/81 5802 140   2/11/81 5802 0   2/11/81 5856 54   2/13/81 6009 153   2/14/81 6075 66   2/15/81 6110 35   2/15/81 6110 35								2/4/ 81	4837	138		·	
2/ 7/81 5315 164								2/ 5/81	4938	101			
2/ 8/81     5501     186       2/ 9/81     5662     161       2/10/81     5802     140       2/11/81     5802     0       2/12/81     5856     54       2/13/81     6009     153       2/14/81     6075     66       2/15/81     6110     35								2/ 6/81	5151	213			
2/ 9/81     5662     161       2/10/81     5802     140       2/11/81     5802     0       2/12/81     5856     54       2/13/81     6009     153       2/14/81     6075     66       2/15/81     6110     35								2/ 7/81	5315	164			
2/10/81 5802 140  2/11/81 5802 0  2/12/81 5856 54  2/13/81 6009 153  2/14/81 6075 66  2/15/81 6110 35								2/ 8/81	5501	186			
2/11/81 5802 0   2/12/81 5856 54   2/13/81 6009 153   2/14/81 6075 66   2/15/81 6110 35   2/15/81 6110 35								2/ 9/81	5662	161			
2/12/81 5856 54 2/13/81 6009 153 2/14/81 6075 66 2/15/81 6110 35								2/10/81	5802	140			
2/13/81 6009 153 2/14/81 6075 66 2/15/81 6110 35								2/11/81	5802	0			
2/14/81 6075 66 2/15/81 6110 35								2/12/81	5856	54			
2/15/81 6110 35								2/13/8	6009	153			
								2/14/81	6075	66			
2/16/81 6155 45								2/15/81	6110	<b>3</b> 5			
								2/16/81	6155	45			
													]

DEVIATION SURVEYS

WELL NAME NELSON 6-11 COUNTY SAN JUAN STATE UTAH

DEPTH	DEVIATION	DEPTH	DEVIATION	DEPTH	DEVIATION	DEPTH	DEVIATION
	. O	1 22.12					
4301					•	-	
4812	1		<u> </u>	<u> </u>			
5334	1 1/4					. •	
6075	3/4	ı					
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	DATE	рертн	WEIGHT	MUD GRADIENT	FUNNEL VIS	PLASTIC VIS	YIELD POINT	GEL STRENGHT	РН	FILTRATE API	CAKE	ALKALINITY FILTRATE	CHLORIDE PPM	CALCIUM PPM	SAND % CONTENT	SOLIDS % CONTENTS	OIL % CONTENT	WATER % CONTENT	% KCL
_	1-30	4110	9.3	.4836	71	36	25	6/11	10.0	5.0	2/32		600	60	.50	6		94	
	1-31	4301	9.3	.5096	53	20	25	3/5	11.0	6.0	2/32	1.2	2800	200	1.	6		94	
	2–1	4395	9.9	.5148	***45	20	13	2/5	11.	6.5	2/32	6.	2700	200	.1,	6		94	in erval or production
-	2–2	4573	9.4	.4888	42	16	6	2/4	9.5	8.6	2/32	.3	2850	120	1	5		95	
-	2-3	4755	9.4	.4888	41	12	4	2/4	9.5	6.2	2/32	.35	1650	140	1	5		95	
	2-4	4888	9.4	.488	43	kk	4	2/2	9,0	6.4	2/32	.2	1450	100	1	6		94	
	2–5	5038	9.3	.4836	37	11.	2	0/2	9.5	5.6	2/32	.6	1625	tr	1	5		95	
	2–6	5231	9.2	.4784	40	13	5	2/4	9.0	6.4	1/32	.2	1750	240	1.5	5		95	
	2–7	5407	9.3	.4836	37	10	2	0/2	10	5.1	2/32		2100	tr	2	5		95	
	2–8	5577	9.3	.4784	40	12	3	0/2	9.0	6.5	1/32		1450	80	2	5	*	95	
	2-9	5749	9.2	.4784	40	15	8	2/2	9.0	4.2	1/32		1610	80	.50	5		95	
	2–10	5802	9.0	.468	41	10	6	2/2	8.5	6.7	2/32		1100	80	.50	4		96	
	2–11	5802	9.0	.468	44	14	7	2/5 .	9.0	7.3	2/32		1500	120	.50	4		96	
	2–12	5945	9.1	.4732	41	16	12	2/5	9.0.	5.2	2/32		1125	120	1	5		95	
	2–13	6056	9.0	.468	56	21	19	2/12	8.5	6.7	2/32	.1	1625	325	1	5		95	
`	2-14	6075	9.0	.468	55	19	17	2/5	9.0	6,0	2/32		?	250	1	4		96	
· -	2–15	6140	8.7	.4524	54	12	12	2/16	7.0	9.7	/32		870	720	1	4		96	
,		<u> </u>	<u> </u>					<u></u>											

DST # 1 Date	2 10 Febuary 198	<u>1</u> T	esting Co	LYNES
WELL NAME: NELSON 6-11				
Formation: UPPER ISMAY In	terval: 5685'-58	02' W	tr. Cushion_	NONE .
Hole Size 7 7/8" Packer Siz		The second secon		
Drl. Collar Size 2 1/4 Bbls/F	t 0.04958 Drlg.	Contractor	BRINKERHOEF-	-SIGNAL
Mud Filtrate: Ppm Nitrate  Minutes  Duration	0	_Ppm Chlor		:
Preflow 30 Initial Shutin 50 Flow Period 60 Final Shutin 60	Gas to Surf. Fluid to Surf. Mud 0 Min	0 Min; ; Wtr 0	Rate Min; Oil	0 Min
Test Description: I FLW WK BOB I				
MIN GTS IN 25 MIN 1/4" CHOKE WIT	H 15# F FLW V WK	INC BOB-IN 2	25 MIN DEC 40	MIN 4" UNDER
WTR AT END OF FLW TOTAL FLUID	RECOVERED 900 FT	OF SL GAS CU	COM TU	
Orifice Plate Size (CHOKE). Temp.	Minutes from V.O.	Pressu <b>re</b>	199 (P\$I) Rate	(MCFPD)
1,74	·	15	2770	.09
3/16		17	. 13	.64
3/16		18		.44
(BOTTOM CHART) Pressure Records (Field Reading	gs) Bomb De	pth 5667!	Bottom Hole	Temp. 121F *
Pre-Flow		Final Flow		2600
IHP 2688 IFP 248 FFP 280	ISIP_313_; IFP_	290 FFP	330 FSIP	300 FHP 2686
Sampler Capacity 2150 Cc's	Sampler Pres	sure 310 PSI	Rstv 0	Temp_0
Cu Ft Gas 5.1 Cc's Oil	0 Cc's W	ater 0	Cc's (Oth	er)
Sampler Recovery (Water): Ppr				
Pipe Recovery: TOP SMPL: 2.2 @	54F 3500 PPM	MIDDLE SMPL:	4 @ 68F 1400	) PPM
BOTTOM CHART: 6 @ 50F 1200 PPM		·		
Problems: 45 FT FILL WORKED TO		· · · · · · · · · · · · · · · · · · ·		
Remarks: TEST SHOWS #3-5 GAS	CHROMATOGRAPH RESU	LTS: C-1: 18	0480 PPM C-2	2: 142760 PPM
C-3: 28560 PPM C-4: 79				: .

( PLEASE NOTE: CHART DIAGRAM ON BACK )

Agent of Operator LEE WHITING

#### BOTTOM CHART

## TOP CHART PRESSURE RECORDS

BOMB DEPTH	56921
IHP	2716
IFP	227
FFP	263
ISIP	323
IFP	291
FFP	312
FSIP	354
FHP	2716



WELL LOGGING - CORE AND WATER ANALYSIS

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

MOUNTAIN STATES RESOURCES, INC.

NELSON 6-11 VEGA FIELD

NESW SEC 6 T33S R24E SAN JUAN CO. UTAH

							,	Z	ONE (	OF INT	EREST !	NO1
INTER	VAL: From	5364	To5	366								
DRILL	RATE: Abv_	ll MIN/FT	Thru_		3 MIN,	/FT					Below_	6 MIN/FT
MUD (	GAS-CHROMA	TOGRAPH	DATA (P	PM)								
		Total (	<del></del>	· · · · · ·	C3	C4-i	C4-n	C5	Не			!
I	Before	2 UNITS										
I	Ouring	130 UNI	TS 62	7								
	After	10 UNIT	s 200	)								
	Type gas incr	ease: Gra	dual 🗌 Sl	narp 🗓								1
	Gas variation	within zon	e: Steady	X Err	atic [	] Inc	reasing		Decrea	sing [		
CARBI	DE HOLE RAT	``. .¥	!				i				Fair 🗌	Good X
FLUO:	Mineral None X Poor Fair	% in tota	Spotty [ ll sample w lithology_		-	CU	Po Fa	one 🔀 oor 🗌 nir 🔲		treaming Slow Mod Fast		
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	Appropriate Control of						1	SAI	MPLE	QUAL	ITY_GOO	<u>D</u>
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ZONE	DESCRIBED E	Y:	VAN MET	ER								



ZONE DESCRIBED BY: KEITH CLEM

# ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL LOGGING - CORE AND WATER ANALYSIS.

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

MOUNTAIN STATES RESOURCES, INC.

NELSON 6-11 VEGA FIELD

NESW SEC 6 T33S R24E SAN JUAN CO. UTAH

ZONE OF INTEREST NO. 2 5583 5587 INTERVAL: From\_ DRILL RATE: Abv 6.5 MIN/FT Below 6.5 MIN/FT 4 MIN/FT Thru\_\_\_\_ MUD GAS-CHROMATOGRAPH DATA C4-i C4-n C5 Total Gas C1 C2 C3 He 2 UNITS Before 70 UNITS 1613 523 125 During 2 UNITS After Type gas increase: Gradual Sharp 🔀 Gas variation within zone: Steady Erratic Increasing Decreasing CARBIDE HOLE RATIO: GRAMS X Min. in Peak = \_\_\_\_ Sensitivity: Poor Fair Good X Even [ FLUO: CUT: None Streaming Mineral [ Spotty [ % in total sample\_\_\_\_\_ Poor [ None Slow [ Fair  $\square$ Mod [ Poor % in show lithology\_\_\_\_\_ Fair Good | Fast . COLOR:\_\_\_\_ COLOR:\_\_ STAIN: None Poor Fair Good Live Dead Residue Even Spotty Lt. Dk. POROSITY: Poor X Fair Good Kind LITHOLOGY LS CRM-LT GY FRM-HD DNS MIC-CRPXLN OCC VFXLN OOL-PEL \_\_\_\_SAMPLE QUALITY GOOD 2/8/81 REMARKS:\_\_\_\_ NOTIFIED\_\_\_\_



MOUNTAIN STATES RESOURCES. INC.

NELSON 6-11 VEGA FIELD

		NESW SEC 6	T338	R24E	SAN	JUAN	co.	HATU			
		:						Z	ONE	OF INT	TEREST NO. 3
INTE	RVAL: From_	5702To_	570	7							
		B MIN/FT Th			6 MI	N/FT					Below 8 MIN/FT
		TOGRAPH DATA					4				
		Total Gas	C1	C2	C3	C4-i	C4-n	C5	He	-	
	Before	2 UNITS									
	During	32 UNITS	750	450	34						
	After	20 UNITS	307	170							
	Type gas increase: Gradual Sharp   Gas variation within zone: Steady X Erratic Increasing Decreasing   CARBIDE HOLE RATIO: GRAMS READING X Min. in Peak = Sensitivity: Poor Fair Good X										
CAR	BIDE HOLE RA'	ΓΙΟ: GRAMS X	Min.	in Pea	k =			ensiti	vity:	Poor [	] Fair [] Good X
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NOT	IFIEDED DUR	KEE 2/9/81	L	RE	MAR	KS:	FRAC			ESTONE	
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ZON	E DESCRIBED I	BY:RY	METER					<del></del>			



WELL LOGGING - CORE AND WATER ANALYSIS\_ GRAND JUNCTION, COLORADO 81501 PHONE 243-3044 2450 INDUSTRIAL BLVD.

MOUNTAIN STATES RESOURCES. INC.

NELSON 6-11 VEGA FIELD

NESW SEC 6 T33S R24E SAN JAUN CO. UTAH

ZONE OF INTEREST NO. 4 \_\_\_To\_\_**5713** INTERVAL: From 5711 Below\_8 MIN/FT 8 MIN/FT 8 MIN/FT DRILL RATE: Abv. Thru\_ MUD GAS-CHROMATOGRAPH DATA (PPM) C1 C2 C3 C4-i | C4-n C5 He Total Gas 20 UNITS 307 170 Before 53 UNITS 1075 | 664 150 32 32 127 During After 10 UNITS 384 266 ---Type gas increase: Gradual X Sharp \_\_ Gas variation within zone: Steady X Erratic Increasing Decreasing CARBIDE HOLE RATIO: GRAMS | X Min. in Peak = \_\_\_\_ | Sensitivity: Poor [ Fair [ Good X Even Spotty X 18 Streaming CUT: None X FLUO: Mineral Slow Poor % in total sample\_ None Mod [ Fair Poor Good [ Fast  $\square$ % in show lithology Fair COLOR:\_ COLOR: Good STAIN: None Z Poor Fair Good Live Dead Residue Even Spotty Lt. Dk. POROSITY: Poor X Fair Good Kind\_\_\_\_ LITHOLOGY LS GY-DK GY WH MICXLN SLTY FRM-HD OOL \_SAMPLE QUALITY GOOD 2/9/81 FRACTURED LIMESTONE ED DURKEE REMARKS:\_ NOTIFIED.

JIM VAN METER

ZONE DESCRIBED BY:\_\_\_



WELL LOGGING - CORE AND WATER ANALYSIS\_

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

MOUNTAIN STATES RESOURCES, INC.

NELSON 6-11 VEGA FIELD

NESW SEC 6 T33S R24E SAN JUAN CO. UTAH

ZONE OF INTEREST NO. 5 5772 5770 INTERVAL: From\_ 5 MIN/FT 8MIN/FT 8 MIN/FT Below DRILL RATE: Abv. MUD GAS-CHROMATOGRAPH DATA (PPM) Total Gas C1 C2C3 C4-i C4-n C5 He 2 UNITS 66 Before 179 63 95 120 UNITS 1248 630 63 During After 3 UNITS 77 Type gas increase: Gradual [ Sharp X Gas variation within zone; Steady X Erratic Increasing Decreasing CARBIDE HOLE RATIO: GRAMS | X Min. in Peak = \_\_\_\_\_ Sensitivity: Poor [ Fair [ Good ] Even Spotty X 18 Streaming CUT: None FLUO: Mineral Slow X Poor K % in total sample... None Fair 🗌 Mod [ Poor % in show lithology\_ORANGE Good Fair COLOR: Good STAIN: None Poor K Fair Good Live Dead Residue Even Spotty Lt. Dk. X POROSITY: Poor Fair Good Kind VUGGY LITHOLOGY LS GY BRN DK GY WH XLN-MICXLN SLTY CHT NOD DNS OOL SAMPLE QUALITY\_ NOTIFIED\_ED\_DURKEE FRACTURED LIMESTONE 2/9/81 REMARKS:\_\_ ZONE DESCRIBED BY: \_\_\_\_JIM VAN METER



ZONE DESCRIBED BY: JIM VAN METER

# ROCKY MOUNTAIN GEO-ENGINEERING CO.

	L L	WELL LOG	GING —	CORE	AND WA	ATER A	NALYS	ıs		<del> </del>		
		2450 INDUST	RIAL BL	/D.		PHONE	243-3044		GF	RAND JUNG	CTION, COLO	RADO 81501
		MOUNTAIN	STATE	S RES	SOURC	ES, II	NC.					
		NELSON 6	-11				:					
		NESW SEC	6 T33	8S R24	E SA	n juai	N CO.	UTAH	I		•	
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INT	ERVAL: From		5	904	<del></del>							
DRI	LL RATE: Abv_	7 MIN/FT T	hru	4	1½ MI	N/FT		· · · · · · · · · · · · · · · · · · ·			Below_7	MIN/FT
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		Total Gas	C1	C2	C3	C4-i	C4-n	C5	He			
	Before	3 UNITS	TR									ř.
	During	86 UNITS	536	133	TR							
	After	3 UNITS	TR									
	Type gas inc	rease: Gradual [	] Sha	rp 🛣			1					
	Gas variation	n within zone: St	eady 🗽	Err	atic [	] Incr	easing		Эестса	sing 🗌		
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	***************************************	<u>.</u>						SAI	MPLE	QUALI	TY	D
NOT	TELED ED DUR	KEE 2/12/81										
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WELL LOGGING - CORE AND WATER ANALYSIS\_\_\_

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

MOUNTAIN STATES RESOURCES, INC.

NELSON 6-11 VEGA FIELD

NESW SEC 6 T33S R24E SAN JUAN CO. UTAH

ZONE OF INTEREST NO.\_\_7\_ INTERVAL: From 5954 To 5964 Below 6 MIN/FT DRILL RATE: Aby 6 MIN/FT Thru 5 MIN/FT MUD GAS-CHROMATOGRAPH DATA (PPM) C1 C2 C3 C4-i C4-n C5 He Total Gas 10 UNITS Before 46 UNITS 536 TR 133 During After 10 UNITS Type gas increase: Gradual X Sharp Gas variation within zone: Steady [ Erratic K Increasing K Decreasing [ CARBIDE HOLE RATIO: GRAMS X Min. in Peak = \_\_\_\_ Sensitivity: Poor \_ Fair \_ Good X CUT: None X Streaming Even [] Spotty [ FLUO: Mineral % in total sample\_\_\_\_ Poor 🗌 Slow None Fair | Mod [ Poor % in show lithology\_\_\_\_\_ Fast Good Fair COLOR:\_\_\_ COLOR:\_\_ Good STAIN: None Y Poor Fair Good Live Dead Residue Even Spotty Lt. Dk. POROSITY: Poor X Fair Good Kind LITHOLOGY SH DK GY BLK CARB SL CALC N SL CALC \_SAMPLE QUALITY\_ CONNECTION AND RIG SERVICE 2/12/81 ED DURKEE REMARKS:\_ NOTIFIED\_ ALTERED TOTAL GAS READING JIM VAN METER ZONE DESCRIBED BY:\_



ZONE DESCRIBED BY: KEITH CLEM

# ROCKY MOUNTAIN GEO-ENGINEERING CO.

MOUNTAIN STATES RESOURCES, INC.

NELSON 6-11

VEGA FIELD

NESW SEC 6 T33S R24E SAN JUAN CO. UTAH

ZONE OF INTEREST NO. 8 \_\_\_To\_\_\_ 5970 INTERVAL: From 5966 Below\_6.5 MIN/FT 2.5 MIN/FT DRILL RATE: Aby 4 MIN/FT Thru\_\_\_\_ MUD GAS-CHROMATOGRAPH DATA (PPM) C4-i C4-n C5 He Total Gas C1 C2 C3 15 UNITS Before 116 518 110 UNITS During 15 UNITS After Type gas increase: Gradual 🔼 Sharp 🗌 Gas variation within zone: Steady K Erratic Increasing Decreasing I CARBIDE HOLE RATIO: GRAMS | X Min. in Peak = \_\_\_\_ | Sensitivity: Poor | Fair | Good | CUT: None Streaming Mineral [ FLUO: Even 🔲 Spotty 🗌 Slow [ Poor | None % in total sample\_\_\_\_\_ Mod [ Fair Poor % in show lithology\_\_\_\_ Good | Fast  $\square$ Fair COLOR:\_\_ COLOR: Good STAIN: None X Poor Pair Good Live Dead Residue Even Spotty Lt. Dk. POROSITY: Poor X Fair Good Kind\_ LITHOLOGY SH BLK MICA SFT-HD CARB IP PLTY N-SL CALC \_SAMPLE QUALITY\_\_ GOOD 2/12/81 REMARKS: RIG SERVICE ALTERED TOTAL NOTIFIED ED DURKEE GAS READINGS



WELL LOGGING - CORE AND WATER ANALYSIS.

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

MOUNTAIN STATES RESOURCES INC.

NELSON 6-11 VEGA FIELD

		NESW S	EC 6 1	33S 1	R24E	SAN J	UAN C				7.0
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MUI	GAS-CHROMA	TOGRAPH DAT	`A							·	
		Total Gas	C1	C2	C3	C4-i	C4-n	C5	He		
	Before	15	230	33							
	During	125	460	116	TR			TR			
	After	15	220	30							
FLU	BIDE HOLE RA'  O: Mineral  None  Poor  Fair  Good  Good	Even Specific Specifi	Min.  otty X  ole  logy_5  ORNG	in Pea	.k =	CUT	F: No Po Fa	ensitivone 😿	rity: S	Poor Fair Slow Slow Fast Fast COLOR:	
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ZON	E DESCRIBED I	BY: JIM VAI	N METE	R				<del></del> -			



ZONE DESCRIBED BY: JIM VAN METER

# ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL LOGGING - CORE AND WATER ANALYSIS\_

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

MOUNTAIN STATES RESOURCES INC.

NELSON 6-11 VEGA FIELD

NESW SEC 6 T33S R24E SAN JUAN CO. UTAH

ZONE OF INTEREST NO. 11 INTERVAL: From 6136 To 6138 DRILL RATE: Abv 15 Thru 11 MUD GAS-CHROMATOGRAPH DATA C4-n C5 C2 C3 C4-i He Total Gas C1 Before 15 220 30 During 110 55**7** 166 24 TR After 70 269 83 Type gas increase: Gradual x Sharp Gas variation within zone: Steady 🔀 Erratic 🗌 Increasing 🗍 Decreasing 🗍 CARBIDE HOLE RATIO: GRAMS X Min. in Peak = \_\_\_\_\_ Sensitivity: Poor \_ Fair \_ Good \_ Even Spotty X CUT: None FLUO: Mineral X Streaming % in total sample\_ Poor  $\square$ Slow  $\square$ None Poor Fair Mod [ % in show lithology 18 Fast | Good [ Pair COLOR:\_ COLOR:\_\_ Good STAIN: None 🔽 Poor 🗆 Fair 🗀 Good 🗀 Live 🗀 Dead 🗀 Residue 🗀 Even 🗀 Spotty 🗀 Lt. 🗀 Dk. 🗀 POROSITY: Poor X Fair Good Kind LS- GY-DK GY-WH-TAN XLN-FXLN-MICXLN DNS TRANSL OCC CALC FL FRAC LITHOLOGY\_ SAMPLE QUALITY GOOD ED DURKEE NOTIFIED\_ REMARKS:\_\_\_\_



Subsidiary of Mountain States Resources, Ltd.
OIL & GAS EXPLORATION & PRODUCTION
OPERATING IN THE ROCKY MOUNTAINS
CBM Building - Box 176 - Cut Bank, Montana 59427 - (406) 873-2235

May 15, 1981

Mr. Nick D. Thomaidis
Southern Division Geologist
MOUNTAIN FUEL SUPPLY CO.
P.O. Box 2329
Farmington, New Mexico 87401

Dear Sir:

Re: MORRIS NELSON #6-11
(Vega Prospect)
San Juan County, Utah

Further to the terms and conditions of our Farmout Agreement, we now take pleasure in enclosing the following:

(1) Daily Completion Report, covering operations of the above captioned well, from April 20th to May 3, 1981. Perforating, acidizing and swab testing Lower Ismay (Piute Knoll Zone).

Trusting you will find everything to your satisfaction, I remain

Yours very truly,

MOUNTAIN STATES RESOURCES, INC.

J. Montalban - President

enc: JVM/jb

cc: R.G. Myers - Manager
Production & Drilling
MOUNTAIN FUEL SUPPLY CO.
P.O. Box 11368
Salt Lake City, Utah 84139

E.F. Durkee
WORLDWIDE EXPLORATION CONSULTANTS, INC.
Capitol Life Bldg. Ste. 1244
225 East 16th Avenue
Denver, Colorado 80203

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Subsidiary of Mountain States Resources, Ltd.
OIL & GAS EXPLORATION & PRODUCTION
OPERATING IN THE ROCKY MOUNTAINS
CBM Building - Box 176 - Cut Bank, Montana 59427 - (406) 873-2235

Daily Completion Report - MSR/MGE-Nelson #6-11 - NESW Sec. 6, T-33S-R24E-San Juan Cty. Utah

- 4-13-81 Moved on NL Well Service Completion Rig and rigged up. Welded bell nipple on 5½" casing. Tubing on location @ 11 AM. P.U. 4-3/4" diameter bit, bit sub and 191 joints 2-3/8" EUE, 4.7 lb., K-55 tubing. Checked PBTD @ 6138' K.B. SDON.
- 4-14-81 R.U. power swivel, pump and tank. Drilled cement out from 6138' to 6150' K.B. Tripped out with tubing and bit. R.U. Gearhart-Go and ran CBL, Gamma Ray, and collar locator logs. Logger PBTD 6151' K.B. Logged from 6151'-5300' K.B. Top cement 5480' K.B. Good bond 6109-14' and 6118-50' K.B. Tripped in w/Baker Full Bore Packer w/one joint tail pipe to 5950' K.B. Set packer and pressured up annulus and had communication to tubing. Pulled up packer and reset at different depths with no success. Started tripping out with packer. SDON. Rained hard from noon until dark.
- 4-15-81 Finished pulling out of hole. Checked packer and re-dress same. Picked up 2-3/8" seating nipple and standing valve. Run in hole @ 321' (5 stands). Set packer and pressured up on back side to 1500 psi. Packer held ok. Pressured up on tubing after every 10 stands (2000 lbs.) no leaks in tubing. Set packer at 5950' and tried pressuring up. Packer would not hold. Fished out standing valve and pressured up on tubing (beneath packer). Packer held ok. Rigged up swab and swabbed well down to 5950'. Rigged up Go-industries and ran in hole with 1-11/16ths tubing gun. Perforated from 6125-6140' w/4 shots per ft. w/1-11/16ths glass shots. Released packer. Went down and tagged bottom @ 6151'. Picked up and set packer @ 6100'. Rigged up swab and swabbed tubing down to 3000'. Shut down for night.
- Finished swabbing well down @ 10:00 AM. (No show of oil or gas, no fluid entry). Run in hole with tail pipe @ 6140'. Spotted 500 gallons of MSR 28% acid across perfs. Pulled up and set packer @ 5614' and acidized w/500 gallons MSR 28%. Pressure increased to 3000-3300 @ 1½ bbls/minute. Pressure broke back to 1600 lbs with rate increase to 2 bbls/minute with pressure increase to 1800 bbls at end of job. Let set 5 minutes w/no bleed off. Bled off pressure. Run in hole and set packer @ 6100'. Rig up and start swabbing @ 12:30 PM. Pulling swab from seating nipple @ 2:00 PM. ( Swabbing back acid water). Had well swabbed down at 2:00 PM. Made swab run once every hour for 4 hrs. with no recovery on last 4 runs. Shut down for the night.
- Had 15 psi on tubing. Bled pressure off. Picked up swab and run in hole. Had 300 ft. of fill up overnight. Well swabbed down in 2 runs. Kept 4-6 ft. flare at middle of each swab run. Rigged up Dowell well and acidized with 15 gallons of MSR 28% at 3½ bbls per minute at 2250 psi. ISI 1450 lbs. Let set for 10 minutes with no bleed off. Tore down Dowell well and started swabbing. Started swabbing @ 1 PM. Swabbed down tubing (24 bbls) by 2 PM. Had 6-8' flare while pulling swab. Ran swab each hour for 3 hrs. and recovered 50-100' of spent acid water each hour. (0.2 to 0.4 bbls/hr) SD at 5 PM for weekend.
- 4-18-81 SITP 45 psi. Completion unit SD for weekend.
- 4-19-81 SITP 90 psi. Completion unit SD for weekend.



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OIL & GAS EXPLORATION & PRODUCTION

OPERATING IN THE ROCKY MOUNTAINS

CBM Building - Box 176 - Cut Bank, Montana 59427 - (406) 873-2235

- Monday

  SITP 110 psi @ 7 AM. Bled well down and gas flow maintained 1' flare. Ran tubing swab and found fluid level @ 5500' depth. (600' fillup or 2.3 bbls in 62 hrs). Swabbed fluid (spent acid water) down in 2 runs. At 9 AM had 2' flare. Tripped out w/Baker fullbore and tripped back in with Baker Model C retrievable bridge plug and retrievamatic packer. Set bridge plug @ 6000' K.B. and packer @ 5734' K.B. Swabbed tubing dry. R.U. Go-International and Tubing gun would only go to 5675' K.B. Would go no further. Pulled out tubing gun and it hung up in every collar to 2800' and then pulled free. Left 88 K.B. Worked down to 5525' K.B. Pulled out. SDON.
- Tuesday

  R.U. pump. Released Retrievamatic packer. Pumped down annulus. Pressured annulus to 2800 psi and pressure broke back to 200 psi. Circulated out glass bridge plug. Retrieved bridge plug and tripped out. Layed down packer and bridge plug. Drained pump. W.O. drilling equipment to drill hole deeper.
- 4-22-81 P.U. 4-3/4" HTC WO bit and 10-34" diameter drill collars. Tripped in to bottom vednesday Mixed up mud and displaced hole mud.
- 4-23-81 Started drilling at 9:25 AM @ 6151' K.B. Went out of show at 6155' K.B. and drilled to 6205' K.B. Drilling dolomite, brown. Bit #1 4-3/4" HTC WO. Mud 10.2, 1bs., 34 ris, 28 cc.
- Picked up 2 jts. tubing, started drilling @ 8 AM. Depth 6205'. Drilled to 6214' & bit quit drilling. Started out of hole @ 11:45 AM, back to drilling 65:15 PM, drilled to 6218'. Pulled 3 jts. SDON. Bit #1: 4-3/4", Hughes #WO, MW 10.2, Vis. 32, W.L. 21.6. Total mud cost \$1,033 (plus brine & Drayage)
- Started drilling @ 8 A.M. Drilled 6218'-6237'. SD @ 1 PM. Pulled up into swabbed down to 4200'. SDON.
- 4-26-81 Hauled 400 bbls fresh water to swab tank to use for acidizing. Continued swabbing. Unloaded hole. Making gas 3-4' flare after each swab run. SDON.
- Monday

  40 psi on tubing. Started swabbing @8AM. Found fluid level @ 5200' depth.

  Swabbed well down @11AM. From 11 AM to 1 PM ran swab once each hour with
  Tripped out and layed down drill collars. SDON.
- P.U. Arrow Model A retrievable bridge plug and full bore packer. Tripped in w/2-3/8" EUE tubing and set retrievable bridge plug @5999' K.B. Set packer @5655' K.B. Swabbed down tubing. W.O. perforators. Go-International on jets/ft. w/1-11/16 glass jets on tubing gun. SDON.



OIL & GAS EXPLORATION & PRODUCTION ROCKY MOUNTAINS - WESTERN CANADA

Daily Completion Report - MSR/MGE-Nelson #6-11 - NESW Sec. 6, T-33S-R24E-San Juan Cty. Utah

4-29-81 Wednesday - Lowered packer so tailpipe was below perfs 5900-05' K.B. R.U. Dowell. Loaded hole w/water and spotted acid across perfs. Set packer @5925' K.B. Acidized perfs 5955-80' K.B. w/500 gals 28% MSR acid. Perfs started taking acid @3100 psi and pressure broke back to 2000 psi. Increased injection rate to 4 BPM @ 2200 psi. ISIP 1400 psi, 5 mins., 1400 psi, 10 mins., 1300 psi. Started swabbing @10:30 AM. Well swabbed down @1 PM. Ran swab once each hour from 1 PM to 6 PM. Rec. 100' acid water (0.4 bbls) from 1 to 4 PM and last two runs at 5 and 6 PM. Had no fluid, but well making gas - 5' to 6' flare burning throughout swabbing. Estimate gas at 350 MCF. SDON @ 6:30 PM.

-30-81 hursday

Set BP @ 5928' K.B. Spotted acid across perfs 5900-05' K.B. Set packer @ 5860' K.B. w/31' tailpipe and acidized w/500 gals. 28% MSR. Pumped 2 BPM @ 2800 psi. Broke from 2800 to 2200 psi. last rate to 4 BPM @ 2200 psi. ISIP 1300 psi, 5 mins., 1300 psi, 10 mins., 1300 psi, R.U. and started swabbing @ 10 AM. Swabbed down @ 12 noon. 1 PM to 6 PM one rum/hr. Recovered 100' acid water and raw acid/hr. @ 3PM 50% oil and 50% unspent acid. 3' flare on end of flowline. 4 PM - 60% oil and 40% acid water. 5 PM - 80% live green gassy oil - 20% acid water. 6' - 8' flare. 6 PM - last rum of day pulled 220' of live green gassy oil, trace of acid water at end of pull. 6' flare throughout pull. Estimate gas @ 250 MCF. SDON.

€01-81 iday

SITP 235 psi @ 8 AM. Released pressure and ran swab. 600' fluid fillup overnight. Recovered 550' (2.0 bbls) oil w/trace of acid water. R.U. Dowell and tested lines to 6000 psi. Placed 1200 psi pressure on annulus. Acidized perfs 5900-05' K.B. w/2000 gals. 28% HCL acid. Dropped 15 perforation ball sealers in first 30 bbls acid w/no ball action. Started pumping into perfs @ 3300 psi and 5 BPM inj. rate. Increased pressure to 3500 psi @ 6 BPM and remained the same thru balance of acid job. ISIP 1500 psi, 5 mins., 1450 psi. 10 mins., 1425 psi. Job complete @ 9:20 AM. Started swabbing tubing @ 9:45 AM and swabbed down @ 1 PM. Ran swab once each hour. 2 PM - recovered about 300' of oil and acid water. 3 PM, 4 PM, and 5 PM ran swab. Recovery as above w/oil cut increasing and good gas blow increasing. At 6 PM had 300' of 90% green gassy oil and 10% acid water.

52-81 urday

SITP 280 psi @ 7:30 AM. Ran swab and had 2000' fillup in 13½ hrs. Swabbed down in 3 runs (9:30 AM).1-run/all oil, 2nd run 95% oil and 3rd run oil with trace acid water. After swabbing down had 6' to 8' flare of gas burning. Ran swab once each hour to noon. Swabbed into tank. Recovered 2 bbls of green oil per hour, measured in swab tank. S.D. for weekend @12:30 PM.

3-81 day

Shut down. Well producing gas on orifice tester. Flowed and measured gas at rate of 287 MCF over week-end. No rig operating.



Subsidiary of Mountain States Resources, Ltd.
OIL & GAS EXPLORATION & PRODUCTION
OPERATING IN THE ROCKY MOUNTAINS
CBM Building - Box 176 - Cut Bank, Montana 59427 - (406) 873-2235

June 11, 1981

JUN 2 5 000

DIVISION OF OIL, GAS & MINING

STATE OF UTAH
Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Attention: Sandy Bates - Clerk Typist

Re: MSR/MGE Nelson #6-11 Well Sec. 6 - T33S - R24E San Juan County, Utah (Our Vega Prospect)

Gentlemen:

This will acknowledge receipt of your letter, dated June 9, 1981, requesting a monthly drilling report for the above captioned well, in which you request well reports on your Form OGC-1B, or a summary report on Company forms.

Accordingly, we take pleasure in enclosing herewith a daily drilling summary, pertaining to the above captioned well, from date of inception, September 22, 1980, to February 16, 1981, when drilling was completed.

Thanking you for drawing our attention to this oversight, we remain

Yours very truly,

MOUNTAIN STATES RESOURCES, INC.

J. Wontalban - President

JVM/cbm Encs:



Subsidiary of Mountain States Resources, Ltd.

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CBM Building - Box 176 - Cut Bank, Montana 59427 - (406) 873-2235

June 11, 1981

STATE OF UTAH
Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Attention: Sandy Bates - Clerk Typist

Gentlemen:

Re: MSR/MGE Nelson #6-11 Well Sec. 6 - T33S - R24E San Juan County, Utah (Our Vega Prospect)

This will acknowledge receipt of your letter of June 9, 1981, requesting well completion data on the above captioned well.

Please be advised that we are now in the process of completing said well, and readying it for production. We are expecting delivery of wellhead equipment and a pumping unit, in the next few days. After this equipment has been installed, and the well is completed and on production, we will promptly and orderly file your Form OGC-3, in triplicate, as you have advised.

Thanking you for drawing this to our attention, and thanking you for past courtesies, we remain

Yours very truly,

MOUNTAIN STATES

S, INC.

J. V. Montalban - President

JVM/cbm

DIVISION OF OIL, G/L a MINING



Scott M. Matheson, Governor Temple A. Reynolds, Executive Director Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

April 23, 1982

Mountain States Resources, Inc. CBM Building P. O. Box 176 Cut Bank, Montana 59427

RE: Failure to comply with the General Rules and Regulations and Rules of Practice of the Division of Oil, Gas and Mining

#### Gentlemen:

Records maintained by the Division of Oil, Gas and Mining indicate that you have failed to respond to numerous requests for information on the Redd 11-1 and Nelson 6-11 wells located in San Juan County, Utah.

Be advised that if accurate information regarding all activities and production on the aforesaid wells is not received by May 3, 1982, I shall schedule an Order to Show Cause before the Board of Oil, Gas and Mining. Among the measures I shall request the Board to approve is a moratorium on all your future drilling applications and operations.

Perhaps up to this point you have not realized the serious possible consequences of your failure to comply with the Division's regulations. The situation is serious and unwarranted. Furthermore, it will not be allowed to persist.

It is my wish that this matter be resolved without compelling you to appear before the Board of Oil, Gas and Mining. Therefore, if I can be of any further assistance, please do not hesitate to contact me.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Carolyn/Driscol1

Special Assistant Attorney General

CD/as

Scale Matheson, Governor Temple A. Regulas, Executive Director Cleon and the Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

April 30, 1982

Memo to File

From: Carolyn Driscoll

On April 30, 1982 I talked with Mrs. Montalban of Mountain tes Resources, Inc. The operations manager will be in Canada for sucher week. Therefore, I gave them an extension of time to file the muested information.

I was informed that neither well has been completed. However, it is anticipated that they will be completed this summer.

The operator is a Canadian corporation operating out of Mana.

This is their first Utah venture. They were under the impression that since they felt the information was confidential they did not have to submit any information. I think I got this misunderstanding stands the out. The operator was informed that the information has to be stated to the Division. However, if requested, the Division will keep a confidential.



Scott M. Matheson, Governor Temple A. Reynolds, Executive Director Cleon B. Feight, vision Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

September 28, 1982

Mountain State Resources, Inc. CBM Building Box 176 Cut Bank, Montana 59427

> RE: MSR Nelson #6-11 Well Sec. 6, T. 33S, R. 24E San Juan County, Utah

#### Gentlemen:

The above referenced well was inspected on September 3, 1982 by Division staff personnel. At the time of inspection, the well was producing on pump and it appears that the well has been tested sufficiently to adequately determine the initial production potential.

The Division therefore requests that the Well Completion Report (copies attached) be submitted indicating the required initial production data. The Division has extended sufficient leniency regarding this matter in the past and request that the required data be promptly submitted so this matter might be concluded.

Very truly yours,

Chief Petroleum Engineer

RJF/as Attachment



A Subsidiary of MSR Exploration Ltd.
OIL & GAS EXPLORATION & PRODUCTION
OPERATING IN THE ROCKY MOUNTAINS
CBM Building - Box 176 - Cut Bank, Montana 59427 - (406) 873-2235

October 13, 1982

water

STATE OF UTAH
Natural Resources & Energy
4241 State Office Building
Salt Lake City, Utah 84114

Attn: Mr. R.J. Firth

Chief Petroleum Engineer

Re: MSR Nelson #6-11 Well Sec. 6, T.33S, R.24E San Juan County, Utah

Dear Mr. Firth:

We have not filed the Completion Report on the above captioned well as we are now attempting to evaluate the results obtained to date.

We have been pumping this well periodically for the last two months but the results and the production obtained, have been very disappointing. The well originally I.P.'d for 41 barrels of oil per/day and 10 of water, but production rapidly declined to 5 barrels per/week. We are only pumping the well a couple of days each week.

Accordingly, we are presently attempting to evaluate the data that we have in hand to decide whether or not we should pull the well and re-acidize the producing zones or suspend the well. This decision will be made in the next fortnight. In the meantime, for your informal records and files, please be advised of the following perforating intervals:

Formation	Interval	Perforation	Treatment	Production
Desert Creek	6125-6140'	4 shots/per/ft.	500gal. MCR 28%	4' - 6' Flare Tested gas 50/MCF
Lower Ismay	5955-5980 <b>'</b>	4 shots/per/ft.	500gal. MCR 28%	Tested gas 50/MCF
Upper Lower Ismay	5900-5905 <b>†</b>	4 shots/per/ft.	500gal. HCL 28%	Tested gas 287/MCF - Swabbed oil 1 b/per/hr
Lower Upper Ismay	5760-5 <u>7</u> 80 <b>'</b>	2 shots/per/ft.	500gal. MCR 28% Re-acid.3000gal. 28% HCL	Swabbed oil 2b/per/hr 85% oil - 15% acid water
Upper Ismay	5690 <b>-</b> 5710'	4 shots/per/ft.	500gal. MCR 28% Re-acid.2000gal.	600' green/oil 600' acid water
	D15(	CEIVEN	28% HCL	Swabbed 2b/per/hr 55% oil & 45% spent acid

RECEIVED OCT 15 1982

DIVISION OF OIL, GAS & MINING



A Subsidiary of MSR Exploration Ltd.

OIL & GAS EXPLORATION & PRODUCTION

OPERATING IN THE ROCKY MOUNTAINS

CBM Building - Box 176 - Cut Bank, Montana 59427 - (406) 873-2235

page 2..... October 13, 1982

As soon as our decision is made to re-perforate and re-acidize, or suspend operations, we will file the official log of the well.

Yours very truly,

MOUNTAIN STATES RESOURCES, INC.

J.V. Montalban - President

JVM/j



A Subsidiary of MSR Exploration Ltd.

OIL & GAS EXPLORATION & PRODUCTION

OPERATING IN THE ROCKY MOUNTAINS

CBM Building - Box 176 - Cut Bank, Montana 59427 - (406) 873-2235

STATE OF UTAH
Natural Resources & Energy
4241 State Office Building
Salt Lake City, Utah 84114

Attn: Mr. R.J. Firth

Chief Petroleum Engineer

December 20, 1982

DEC 27 1982

DIVISION OF OIL, GAS & MINING

Re: MSR/MGE Nelson #6-11 Well Sec. 6, T.33S, R.24E San Juan County, Utah

Dear Mr. Firth:

We enclose herewith the Completion Log of well pertaining to the above captioned. Please excuse the delay for this final report, but we have been evaluating production results for the last several weeks. The well has turned out to be a disappointment. When production tests were started the well I.P.'d for 41 barrels a day and within 60 days was producing nothing on a daily basis. During November the well was pumped once a week, making less than 5 barrels at a time.

Accordingly, as of December 1, 1982, the well has been shut-in and will be suspended until next spring.

If you require any further information, kindly advise us.

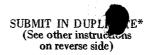
Very truly yours,

MOUNTAIN STATES RESOURCES, INC.

J. Montalban, P.E. Manager of Operations

JVM/j Enc:

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING





56 64 01

5. LEASE DESIGNATION AND SERIAL NO

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**SAME OF OPERATOR**    MOUNTAIN States Resources, Inc.	b. TYPE OF COM				7		Other						
Mountain States Resources, Inc.  3. JURISES OF OFERATOR  CBM Bilds, - Box 176 - Cut Bank, Montana 5942  4. LOCATION OF WELL (Report location clearly and in accurrance with my Stati-reference Line (Carly and Experimental Color)  At top prod. Internal reported below  As above  14. Fearly 70.  43-037-30554  May 23, 1980  15. Date specord of internal reported below  As above  16. Date specified below  16. Date specified below  17. Date specified below  18. Date specified below  19. Date specified below of the specified below  19. Date specified below  19. D				PLUG BACK			Other				S. FARM OR I	EASE I	NAME
3. AMBRESS OF OPERATOR CBM Bldg Box 176 - Cut Bank, Montana 5942  4. LOCATION OF WELL (Report location clearly and in accordance with only Statistical Color of Statistics 2, 130° FSL 1, 820° FWL NESW  At tops prod. Interval reported below As above  14. Ferrity 10.  15. Date several reported below As above  15. Date several reported below As above  16. Date instruction of the prod. Interval reported below As above  17. Date color interval reported below As above  18. Date several reported below As above  19. Date instruction of the prod. Interval reported below As above  19. Date instruction of the prod. Interval reported below As above  19. Date instruction of the prod. Interval reported below As above  19. Date instruction of the prod. Interval reported below As above  19. Date instruction of the prod. Interval reported below As above  19. Date instruction of the prod. Interval reported below As above  19. Date instruction of the prod. Interval reported below as a rep	2. NAME OF OPERAT	ron					Carrier F	W-100	412	177	Morris	Nel	son
CEM Bidg. — Box 176 — Cut Bank, Montana 5942  4. Location of white (Report location clearly and in accordance with only Statis-report reading (1.1 10.2 11.2 11.2 11.2 11.2 11.2 11.2 1	Mountain	States Res	ource	s, Inc	2.				1765	i (V	W. WILL NO.		<del></del>
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As above    14. Permit No.   14. Permit No.   12. County of   13. State   15. Date 2.0.   14. Permit No.   15. Date cont.   (Redge to prod.)   18. ELEVATIONS (OF. RES. RE., OR. NO. TO.)   19. ELEV. CARROURED CONT.   18. Permit No.   18. Permit						SW			onnen	าม NF	OR AREA	., M., O	a block and survey
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LOWER ISMAY - 5900-5905 - gas 287mcf/d + swabbed 1bb1/per hr.  28. TWPETECTRITIONS OF THE COLOR BAND - 5690 5710 swebbed 2 bb1s/hr oil and water of the color of												1 20.	
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31. PERFORATION RECORD (Interval, size and number)  1.25 - 6140 - 4 shots/ft. 1 11/16 glass 1.00 - 5905 - 4 shots/ft. 1 11/16 glass 1.70 - 5770 - 4 shots/ft. 1 11/16 glass 1.70 - 5780 - 2 shots/ft. 1 11/16	SIZE	TOP (MD)	BOTTO	M (MD)	SACKS CI	MENT*	SCREEN (1	(D)	SIZE		DEPTH SET (MD	)	PACKER SET (MD)
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2000 - 5905 - 4 shots/ft. 1 11/16 glass 760 - 5770 - 4 shots/ft. 1 11/16 glass 770 - 5780 - 2000 gal MCR 28% acid 770 - 5780 - 2000 gal HCL 28% acid 770 - 5780 -					~1 ~ ~ ~ ·	,	I					-	
The properties of the proper	900 - 5905 -	4 shots/f	t• 1	11/16	grass		DEPTH IN	TERVA	L (MD)	AM	OUNT AND KIND	OF MA	ATERIAL USED
Sept. 1982   PRODUCTION   PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)   Well STATUS (Producing or shut-in)	760 - 5770 -	4 shots/f	t. 1	11/16	grass		6125 -	614	40	500_g	al MCR 28	% Ac	id
33.*  PRODUCTION  Sept. 1982  Pumping 2"x12'x12" top hold down  DATE FIRST PRODUCTION  Sept. 1982  Pumping 2"x12'x12" top hold down  DATE OF TEST  HOURS TESTED  CHOKE SIZE  PROD'N. FOR OIL—BEL.  TEST PERIOD  ALCULATED  FLOW. TURING PRESS.  CASING PRESSURE  CALCULATED  24 HOUR BATE  ALCULATED  24 HOUR BATE  ALCULATED  34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  Used for fease fuel(pump) motor  See reverse side  36. I hereby ceptify that the foregoing and staffed information is complete and correct as determined from all available records  TITLE Manager of Operations  DATE DEC. 15, 1982										500_g	al MCR 28	% ac	id
PRODUCTION  DATE FIRST PRODUCTION  Sept. 1982  Pumping 2"x12"x12" top hold down  PRODUCTION  DATE OF TEST  HOURS TESTED  CHOKE SIZE  PROD'N. FOR OIL—BEL.  GAS—MCF.  WATER—BEL.  OIL GRAVITY-AFI (CORE.)  10#  450#  41					8-405					2000	gal HCI 2	8% а	cid
PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)  Sept. 1982  Pumping 2"x12'x12" top hold down  PART OF TEST  HOURS TESTED  CHOKE SIZE  PROD'N FOR OIL—BEL.  ALCULATED  ALCULATED  24-HOUR RATE  CASUMG PRESSURE  CALCULATED  24-HOUR RATE  ALCULATED  24-HOUR RATE  ALCULATED  24-HOUR RATE  ALCULATED  24-HOUR RATE  ALCULATED	33.*	<del>`</del>			<del></del>	PROT		5.78	30	2000	gal HCI. 2	8% а	cid
Sept. 1982 Pumping 2"x12"x12" top hold down  DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO  PLOT. 82 24 hrs pump nil 41 trace 5 bbls nil  PROW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE 41 trace TSM 5 42  34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  Used for fease fuel (pump) motor  See reverse side  36. I hereby certify that the foregoing and staffed information is complete and correct as determined from all available records  SIGNED Montalban  TITLE Manager of Operations DATE Dec. 15. 1982	DATE FIRST PRODUCT	ION PROI	DUCTION	METHOD (	Floroing, g			and t	upe of pun	no)	WELL S	TATTIS	(Producing or
DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR OIL—BÉL. GAS—MCF. WATER—BEL. GAS-OIL RATIO  PLOY. 82 24 hrs pump nil 41 trace 5 bb1s nil  PLOW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE 41 trace TSM 5 42  34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  Used for fease fuel(pump) motor  See reverse side  36. I hereby certify that the foregoing are started information is complete and correct as determined from all available records  TITLE Manager of Operations DATE Dec. 15, 1982	Sept. 1982										shut	in)	(2.000000)
Part. 82 24 hrs pump nil TEST PERIOD 41 trace 5 bbls nil  FLOW. TUBING PRESS.   CASING PRESSURE 24-HOUR RATE 24-HOUR RATE 41 trace TSM 5 42  34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  Used for fease fuel (pump) motor  See reverse side  36. I hereby certify that the foregoing and stated information is complete and correct as determined from all available records  TITLE Manager of Operations DATE Dec. 15, 1982	DATE OF TEST				PROD'I	N. FOR		······	GAS-M	CF.			AS-OIL RATIO
TITLE Manager of Operations    CASING PRESSURE   CALCULATED   24-HOUR RATE   CALCULATED   24-HOUR RATE   CALCULATED   24-HOUR RATE   CALCULATED   24-HOUR RATE   CORE.)    10#   450#   41	ent. 82	24 hrs pu	mp .	nil :	TEST	PERIOD	/1		1		1		
10# 450# 41 trace TSM 5 42  34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  Used for lease fuel(pump) motor  35. LIST OF ATTACHMENTS  See reverse side  36. I hereby ceptify that the foregoing and planted information is complete and correct as determined from all available records  SIGNED  Montalban  TITLE Manager of Operations  DATE Dec. 15, 1982	FLOW. TUBING PRESS.		RE CA	LCULATED	OIL-	BBL.		MCF.	LIAC				
Used for lease fuel(pump) motor  See reverse side  36. I hereby centry that the foregoing and started information is complete and correct as determined from all available records  SIGNED  Montalban  TITLE Manager of Operations  DATE Dec. 15, 1982	10#	450 <i>#</i>	24	-HOUR : BA		1	trac	e TS	SM	5			, ,
See reverse side  36. I hereby certify that the foregoing are planted information is complete and correct as determined from all available records  SIGNED Montalban  TITLE Manager of Operations  DATE Dec. 15, 1982	34. DISPOSITION OF G	AB (Sold, used fo	r fuel, v	ented, etc.	)	······································							
See reverse side  36. I hereby certify that the foregoing are planted information is complete and correct as determined from all available records  SIGNED Montalban  TITLE Manager of Operations  DATE Dec. 15, 1982	Used for	lease fue	1(pum	p) mot	or						J. Monta	1ban	-R.Roncco
36. I hereby certify that the foregoing are started information is complete and correct as determined from all available records  SIGNED TITLE Manager of Operations DATE Dec. 15, 1982				:			······································		· <del> · · · · · · · · · · · · · · · · ·</del>				
signed Montalban Title Manager of Operations DATE Dec. 15, 1982				,	1		,						
SIGNED TITLE Manager of Operations DATE Dec. 15, 1982	36. I hereby certify	that the torego	ing ard	day led	nformation	is comp	lete and cor	ect as	determin	ed from	all available re	cords	
Montalban DATE Dec. 15, 1902	(5	4 111 1	K JOH	ban									
	SIGNED	Montalh	20		TI	rle 🕍	<u>kanager</u>	of (	<u>)perati</u>	ons	DATE	<u>De</u>	<u>c. 15, 1982</u>
	///		e Instr	uctions o	ind Space	s for A	dditional	Data	on Paul	لدناك معر	<i>.</i>		

# NSTRUCTIONS

or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments marai: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency

should be listed on this form, see item 35.

Hen 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State

been 18: Indicate which elevations.

Hem 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Hems 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval; to pe separately produced, showing the interval reported in item 83. Submit a separate report (page) on this form, adequately identified, for each additional data pertinent to such interval.

Hem 29: "Sacks Coment": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Hem 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

Worldwide Exploration Consultants, Geological Report by

Containing Summary of Well,

Surveyor Plat,

Sample Description Stratography Report

37, SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES O DEFTH INTERVAL TESTED, CUSH	OUS ZONES: TANT ZONES OF PO TESTED, CUSHION	MARY OF POROUS ZONES: show all important zones of porosity and contents thereof; depth interval tested, cushion used, time tool open, flowing	S N	RED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING D SHUT-IN PRESSURES, AND RECOVERIES	38.	Geologic Markers	
FORMATION	TOP	**************************************	th	DESCRIPTION, CONTENTS, ETC.		¥	TOP
Dakota Sandstone	Surface	46.9151				MBAS. DUPTH	TRUB VERT. DEPTH
Morrison Formation	n 240'	+6,685					
Summerville Form	390	+6,535					
Curtis Formation	680	+6,245					
Entrada Formation	1 760	+6,1651					
Carmel Formation	950	+5,975'					
Navajo Formation	1,065	+5,860					
Kayenta Formation	1 1,220'	+5,705					
Wingate Formation	1,420	+5,505'					
Chinle Formation	1,720	+5,205					
Shinarump Formation	on2,575	+4,350'					
Moenkopi Formation	n 2,796'	+4,129'					
Cutler Formation	2,870	+4,056					
Hermosa Formation	3,750	+3,776		•			
Honaker Trail	4,625	+2,301'					
Paradox	5,351	+1,577					
Upper Ismay	5,681	+1,245			,	-	
Second Shale	5,820	+1,106			day displayed		
Piute Knoll	5,834	_	Lower Upper	Ismay)			
Lower Ismay Shale		+1,008					-
Lower Ismay Lst.	5,986	+ 9401				Q. A	•
"B" Zone Shale	6,044	+ 8821					
Desert Creek	6.102	+ 824'					

782

Salt

State of Utah
- Department of Natural Resources
Division of Oil Gas and Mining

## BOND

Know all men by these presents,

We: Mountain States Resources, Inc., a Montana Corporation, Box 176, Cut Bank
County of Glacier in the State of Montana as Principal,
and Hartford Accident and Indemnity Company of Hartford, Connecticut
as sureaty, authorized to do business in this State, are held and firmly bound unto the
State in the penal sum as indicated, for the use and benefit of the Division of Oil.
Gas and Mining, lawful money of the United States, for which payment, well and truly
to be made to the State of Utah, we bind ourselves, and each of us, and each of our heirs.
executors, administrators or successors, and assigns jointly and severally, firmly by
these presents.
The condition of this obligation is that whereas the above bounden principal proposes
to drill a well or wells for oil, gas or stratigraphic purposes in and upon the following
described land situated in the State of Utah, to-wit:
Statewide fee acerage
Now, therefore, if the above bounden principal shall comply with all of the provisions
of the laws of this State, and the rules, regulations and orders of the Division of Oil,
Gas and Mining of the State, all notices and records required by said office, including,
but not limited to the proper plugging of said well or wells, and filing with said
Division of the State, then this obligation is void; otherwise, the same shall be and
remain in full force and effect.
Penal sum of Fifty Thousand Dollars***********************************
The state of the s
Witness our hands and seals, this 20 day of December, .1983,
Witness our hands and seals, this 20 day of December, .1983.  South And Andrews 455.45.
Witness our hands and seals, this 20 day of December, .1983.  South Aris.  Witness our hands and seals, this 20 day of December,
Witness our hands and seals, this 20 day of December, .1983.  South And Andrews 455.45.
Witness our hands and seals, this 20 day of December,  Witness our hands and seals, this 20 day of December,  Attorney-in-Fact  Attorney-in-Fact
Witness our hands and seals, this 20 day of December, .1983.  South Aris.  Witness our hands and seals, this 20 day of December,
Witness our hands and seals, this 20 day of December,  Witness our hands and seals, this 20 day of December,  Attorney-in-Fact  Surety
Witness our hands and seals, this 20 day of December,  Witness our hands and seals, this 20 day of December,  Attorney-in-Fact  Attorney-in-Fact
Witness our hands and seals, this 20 day of December,  Witness our hands and seals, this 20 day of December,  Approved as to form and execution:  OFC 21 23
Witness our hands and seals, this 20 day of December,  Witness our hands and seals, this 20 day of December,  Attorney-in-Fact  Surety  DFC 2 1 23
Witness our hands and seals, this 20 day of December,  Witness our hands and seals, this 20 day of December,  Attorney-in-Fact  Surety  Approved as to form and execution:  DFC 2 1 23  ATTORNEY GENERAL  By: Manual Seals, this 20 day of December,  Countersigned: Dye, Tavary & Fiftee, Inc.  By: Manual Seals, this 20 day of December,  Countersigned: Dye, Tavary & Fiftee, Inc.  By: Manual Seals, this 20 day of December,  Countersigned: Dye, Tavary & Fiftee, Inc.  By: Manual Seals, this 20 day of December,  Countersigned: Dye, Tavary & Fiftee, Inc.
Witness our hands and seals, this 20 day of December,  Witness our hands and seals, this 20 day of December,  Attorney-in-Fact  Surety  Approved as to form and execution:  ATTORNEY GENERAL  Countersigned:  Dye, Tyvary & Junge Ing.
Witness our hands and seals, this 20 day of December,  Witness our hands and seals, this 20 day of December,  Attorney-in-Fact  Surety  Approved as to form and execution:  ATTORNEY GENERAL  By:  By:  ATTORNEY Pacidon 14 December,  Countereigned:  Dye, Tylary & Julyae, Inc.  By:  AREA  By:  AREA  ATTORNEY Besiden 14 Julyae  By:  AREA  ATTORNEY BY:



•	MENT OF NATURAL R ON OF OIL, GAS, AND		5. LEASE C	SEIGNATION AND SERIAL NO.
SUNDRY NOT  (Do not use this form for propo Use "APPLIC	ICES AND REPORT		6. IF INDI	AN, ALLOTTER OR TRIME NAME
I. OIL Y UAS				BELMENT HAME
WELL WELL OTHER  2. NAME OF OPERATOR				A LEASE NAME
MOUNTAIN STATES RE	ESOURCES, INC.		Morr	is Nelson
3. ADDRESS OF OPERATOR	2005 0 4 3		9. WELL 1	
CBM Bldg P.O. I	30x 1995 - Cut 1	Bank, Montana 5		AND POOL, OR WILDCAT
LOCATION OF WELL (Report location of See also space 17 below.) At surface	ciently and in accordance with	TO THE PERSON	1	
$NE_{4}^{1}$ SW $\frac{1}{4}$ Sec. 6		RECEIVED		r., B., M., OR RLW. AND VRT OR ARRA
1820' FWL and 2130	)' FSL	JUN 1 5 1984	Sec.	6,T33S,R24E,S.
4. PERMIT NO.	15. BLEVATIONS (Show wheth	her DF, RT, GR, etc.)	12. COUNT	T OR PARISH 18. STATE
42-037-30554	6915 GL	DIVISION OF O	II San	Juan Utah
6. Check A	ppropriate Box To Indica			
NOTICE OF INTE	NTION TO:	1	AUBARQUANT ABPORT	07:
TEST WATER SEUT-OFF	PULL OR ALTER CASING	WATER SHUT-OF	• 🔲	REPAIRING WELL
PRACTURE TREAT	MULTIPLE COMPLETE	PRACTURE TREAT		ALTERING CASING
SHOOT OR ACIDIZE	ABANDON* X	SHOUTING OR AC	IDIZING	ABANDONMENT*
REPAIR WELL (Other)	CHANGE PLANS	(Other)	eport results of multiple n or Recompletion Repor	completion on Well
17. DESCRIBE PROPOSED OR COMPLETED OF proposed work. If well is direct nent to this work.)	ERATIONS (Clearly state all perionally drilled, give subsurface	release dutuile and also see	tinent dates including e	stimated date of starting any
MOUNTAIN STATES REbecause commercial done in accordance follows:	L production has	s not been atta	ined. All w	ork will be
<ul><li>3. Run free point</li><li>4. Run string sho</li><li>5. TOOH and lay</li></ul>	ing and remove s t survey to dete ot and back off down 5½" casing	ermine free poi 5½" casing at •	free point.	sing. ross 5½" casing
7. Fill hole with at 2236' KB.	n 9.0 ppg fresh ass B cement ac			
	head and spot e marker and cle			face.
This work will con	nmence as soon a	as regulatory a	approval is r	eceived.
18. I hereby certify that the foregoing	<b>≈c</b>	Area Superint	weenay THE.	TATE 13.1984
Reno N. Ronco	co Pet Eng TITLE		AH DIVISIO	OF
(This space for Federal or State of	dice use)	OIL (	MS AND MY	NING
APPROVED BY	TITLE	CATE	16/19/84	
Casing amuli at su w/ at least 10 sx	rtace to be plug	19 cd (3)	This K. B	
ay an ieusi it sh	/	ections on Reverse Side		ノ
	See instru	MINUTE AIL IVELANDE SING		

STATE CRUIAH TALEBRAL PAL CURDES On Gus & Branca

355 A. North Temple • 3 Tripa Center • Suite 350 • Salt Lake City, एन 84180-1203 • 801-5**38**-5340

September 23, 1986

Mr. J. V. Montalban Mountain States Resources Inc. CBM Building, Box 176 Cutbank, Montana 59427 092501

1945 - 1951 - <mark>1965 - 1965 - 19</mark>51

Sele<sup>3</sup> Discourse File Selection of C **Biomie** Alike elegation Philips (Inc.) of C

Dear Mr. Montalban:

RE: Morris Nelson Well No. 6-11, Sec.6, T.33S,R.24E, San Juan County, Utah

The Division of Oil, Gas and Mining has recently received a request from the mineral lease owner of the subject well, Mr. Morris Nelson. Mr. Nelson asked that the Division take action to require the plugging and abandonment of the subject well, as was proposed in a sundry notice from your company dated June 13, 1984, and approved by this Division on June 19, 1984. Although the Division cannot enforce the requirements of private lease agreements, you are encouraged to resolve this matter as quickly as possible to aviod any further action by the Board of Oil, Gas and Mining or through civil action by the mineral lease owner.

Enclosed is a copy of the oil and gas inspection report dated August 5, 1985, which indicates that the well remains unplugged and unreclaimed. Although you have indicated your intent to abandoned the well, the substantial length of time which has elapsed since you submitted the original sundry notice is a concern to the Division. If the well remains inactive and unplugged, it could develop into a potential ground water pollution hazard.

We ask that you respond directly to this office within 15 days from the date of this letter, indicating your plans to resolve this matter. Thank you for your prompt consideration of this request.

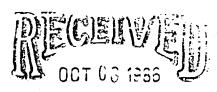
Sincerely

John R. Baza

Petroleum Engineer

cc: Mr. Morris Nelson D. R. Nielson R. J. Firth Well File

0288T-104



DATE: Sept 26, 1986

DIVISION OF OIL. GAS & MINING THE HARTFORD

Midwestern Bond Underwriting Center 100 Park Plaza Naperville, Illinois 60566 Telephone: (312) 369-2100

BOND NO. 505 6108

Gentlemen:

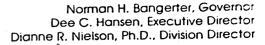
RE: Mountain States Resources # 5056108

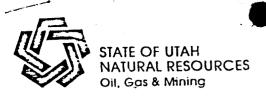
Please inform us regarding the number of permits covered by the captioned blanket drilling and/or lease bond.

We are not willing to accept any additional liability under the captioned bond. effective 12-20-86 . Would you please confirm to us that this request has been accepted. A self addressed, stamped envelope is enclosed for your convenience.

Very truly yours,

BY: 7/1/14 & Let
Attorney-in-Fa





355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

October 17, 1986

The Hartford Insurance Group Naperville Office Park 100 Park Plaza Naperville, Illinois 60566

Attention: Mary Fox

Gentlemen:

Re: Blanket Bond #5056108 - Mountain States Resources, Inc.

In regards to your letter dated September 26, 1986, our records indicate that there are three wells that are covered under the above-referenced surety.

These wells include:

Edis Calvert #1 - Sec. 35, T. 34S, R. 25E - San Juan County Redd #11-1 - Sec. 11, T. 33S, R. 23E - San Juan County Morris Nelson 6-11 - Sec. 6, T. 33S, R. 24E-San Juan County

Additional liability will be limited to the above listed wells. If further information is needed regarding this surety, please feel free to contact me.

Sincerely,
Arline Sollies

Arlene Sollis

Administrative Analyst

cc: Mountain States Resources

D. R. Nielson R. J. Firth

John R. Baza

8989T-60



A Subsidiary of MSR Exploration Ltd. OIL & GAS EXPLORATION & PRODUCTION OPERATING IN THE ROCKY MOUNTAINS CBM Building - Box 1995 - Cut Bank, Montana 59427-1995 - (406) 873-2235

November 27, 1984

43-037-30554 NE/SW Sec 6-335-24E Maria Nelson 6-11

Lee

Mr. Morris E. Nelson 176 Blue Mtn. Blvd. Monticello, Utah 84535

Dear Morris:

RE: Oil & Gas Lease Morris E. Nelson Vega Prospect San Juan County, Utah

We enclose herewith our check #12014, in the amount of \$310.42, which represents rental for one year (11/4/84 - 11/4/85) on the above captioned lease.

We are paying you this rental as we have not yet completed the plugging and abandoning of your well - which will be done next spring.

We gave it the old "college try" and tried to make a commercial producer out of the Nelson #6-11 - but, old mother nature's bosum just did not want to yeild to our efforts.

Yours very truly,

MOUNTAIN STATES BESOURCES, INC.

Mgr. of Operations

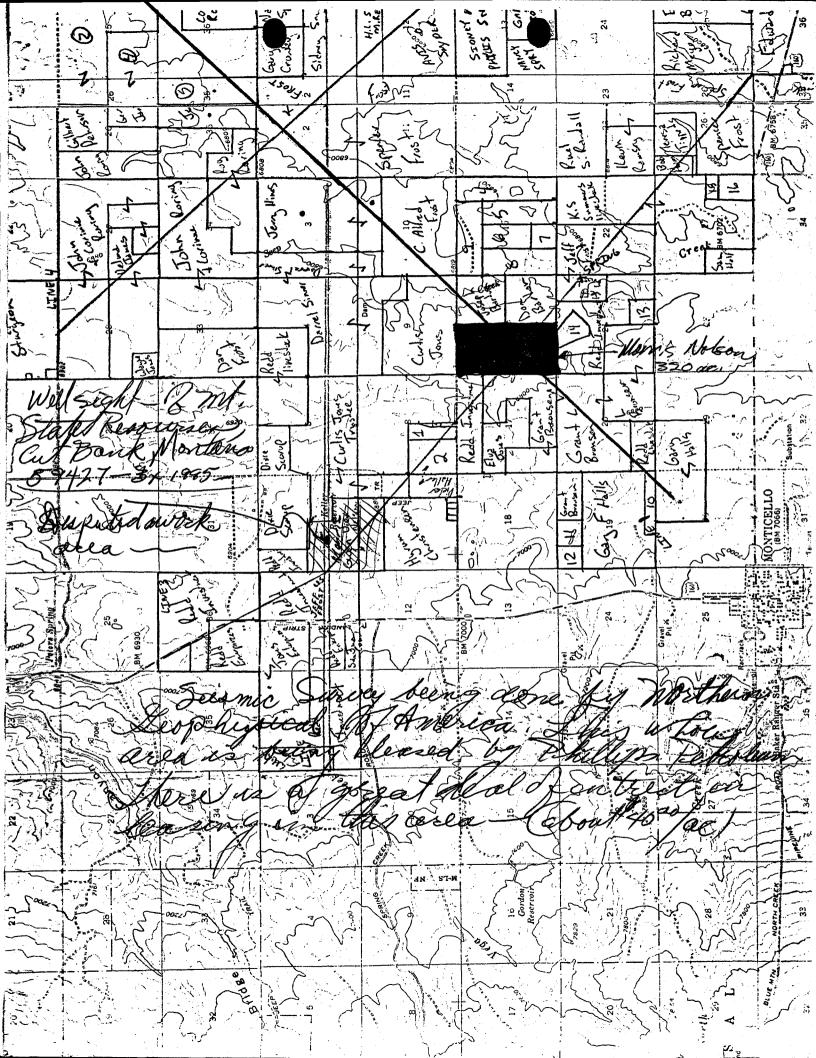
JVM/cbm Enc:

MOUNTAIN STATES RESOURCES, INC. A Subsidiary of MSR Exploration Ltd. OIL & GAS EXPLORATION & PRODUCTION OPERATING IN THE ROCKY MOUNTAINS CBM Building - Box 1995 - Cut Bank, Montana 59427-1995 - (406) 873-2235 (Son) Tate Man Mr. Morris E. Nelson 176 Blue Mountain Rd. Monticello, Utah 84535 RE: Release of Oil and Gas Lease Enclosed please find the "Release of Oil and Suit with sted from us some time ago.

We do apologize for the time 1ontalban has been 1
to an 1 Morris Nelson #6-11 Dear Mr. Nelson: Gas Release " you requested from us some time ago. Trusting all is in order, I remain

Since

Since ing your request. Mr. Montalban has been in the office only briefly the past few months, due to an operation last fall. He is just now getting his correspondence caught up. MOUNTAIN STATES RESOURCES, INC. Evelyn Anderson, Secretary EA/me Enc: diff-





A Subsidiary of MSR Exploration Ltd.
OIL & GAS EXPLORATION & PRODUCTION
OPERATING IN THE ROCKY MOUNTAINS
CBM Building - Box 1995 - Cut Bank, Montana 59427-1995 - (406) 873-2235

November 27, 1984



DIVISION OF OIL, GAS & MINING

Mr. Morris E. Nelson 176 Blue Mtn. Blvd. Monticello, Utah 84535

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Morris E. Nelson
Vega Prospect
San Juan County, Utah

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Yours very truly,

MOUNTAIN STATES BESOURCES, INC.

ntalban - Mgr. of Operations

JVM/cbm Enc: DELUXE - FORM WV-3 V-2

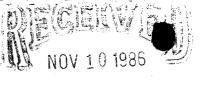
CTB-11750

Royalty on production sold from the Nelson #6-11 well, located Sec. 6 - T33S - R24E - San Juan County, Utah - as per attached copy of Run Ticket and Giant Refining Statement - July 1984:  118.47 Bbls. sold for value	DATE	DELUXE - FORM WV-3 V-2	TT120
Sec. 6 - T3SS - R2HE - San Juan County, Utah - as per attached copy of Run Ticket and Giant Refining Statement - July 1984:  118.47 Bbls. sold for valus. \$3,506.71 Less Transportation. \$213.25) \$3,293.47 X .125 = \$3,293.47  \$411.68  **SOURCES, INC.**  **DELUCE, FORM WV.3 **  **DELUCE, FORM WV.	Sept. 27/84	Royalty on and the	AMOUNT
118.47 Bbls. sold for value		Sec. 6 - T33S - R24E - San Ivan Gamelon #6-11 well, located	
MOUNTAIN STATES  RESOURCES, INC.  DETACH AND RETAIN THIS STATEMENT TO TROUBLE CORRESPONDED TO TROUBE DESCRIPTION OF RECEIPT DEBMENT  DELUCE, FORMWV3 V2  AMOUNT  Sept. 16/85  Annual rental on 0il & Gas Lease dated March 1.1984 by and between Morris E. Nelson and Mountain Fuel Supply, later Mtn. Fuel Supply assigns and transfers to Mountain States Resources, Inc. on Sept. 26, 1984 the following: Township 33 South, Range 24 East, SIM. Sec. 6: Lots 6, 7, Exp. W., SWASEA Sec. 7: Lot 1, NELNWA, NWANEA located in San Juan County, Utah. 310.42 acres. \$1.00 per acre Rental. \$311.00  DUNTAIN STATES SOURCES, INC.  DETACH AND RETAIN THIS STATEMENT THE ATLANSAC DEACH AND RETAIN THIS STATEMENT DEACH AND RECOMMENDED THE ATLANSAC DEACH AND RECOMMEND THE ATLANSAC DEACH AND RECOMMEND THE ATLANSAC DEACH AND RECOMMEND THE ATLANSAC DEACH AN		118.47 Bbls. sold for value \$3,506.71 Less Transportation (\$213.25)	
DELUXE FORM WW-3 V-2		\$3,293.47 x .125 =\$3,293.47	\$411.68
DATE  DELUXE, FORMWW3, V2  DESCRIPTION OF PROMOTED SERVING PROMOTED SERVING CORRECT PROBLEMS.  DELUXE, FORMWW3, V2  DESCRIPTION  DESCRI	4		
Annual rental on 0il & Gas Lease dated March 1.1984 by and between Morris E. Nelson and Mountain Fuel Supply, later Mtn.  Fuel Supply assigns and transfers to Mountain States Resources, Inc. on Sept. 26, 1984 the following:  Township 33 South, Range 24 East, SIM.  Sec. 6: Lots 6, 7, P-3SW4, SW4SP4  Sec. 7: Lot 1, NE-NW4, NW-NPE located in San Juan County, Utah.  310.42 acres\$1.00 per acre Rental\$311.00  Acrial acres Acria Carres Carres Countain San Juan County County  CUNTAIN STATES  SOURCES, INC.  DELUXE - FORM WV-3 V-2  DELUXE - FORM WV-3 V-2  DELUXE - FORM WV-3 V-2	MOUNTAIN STA	THE ATTACHED CHECK IN DARKING IN THE TOTAL OF THE PARTY O	
Annual rental on Oil & Gas Lease dated March 1.1984 by and between Morris E. Nelson and Mountain Fuel Supply, later Mtn. Fuel Supply assigns and transfers to Mountain States Resources, Inc. on Sept.26, 1984 the following: Township 33 South, Range 24 East, SLM. Sec.6: Lots 6,7,E/SW4,SW4SE4 Sec.7: Lot 1,NE/NW4,NW4NE4 located in San Juan County, Utah.  310.42 acres\$1.00 per acre Rental\$311.00  Clid acres\$1.00 per acre Rental\$311.00  DUNTAIN STATES SOURCES, INC.  DETACH AND RETAIN THIS STATEMENT THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW. NO RECEIPT DESIRED.  CTB- 12014	RESOURCES, IN	The control of the co	1284
DUNTAIN STATES SOURCES, INC.  DETACH AND RETAIN THIS STATEMENT FOR THE ATTACHED CHECK IS IN PAYMENT OF TEMS DESCRIBED BELOW.  DELUXE - FORM WV-3 V-2  DATE  THE ATTACHED CHECK IS IN PAYMENT OF TEMS DESCRIBED BELOW.  DELUXE - FORM WV-3 V-2  TABLE TO THE ATTACHED CHECK IS IN PAYMENT OF TEMS DESCRIBED BELOW.  DELUXE - FORM WV-3 V-2  TABLE TO THE ATTACHED CHECK IS IN PAYMENT OF TEMS DESCRIBED BELOW.  DELUXE - FORM WV-3 V-2  TABLE TO THE ATTACHED CHECK IS IN PAYMENT OF TEMS DESCRIBED BELOW.  DELUXE - FORM WV-3 V-2	RESOURCES, IN	DELUXE FORM-WV-3 V2	
DUNTAIN STATES  DETACH AND RETAIN THIS STATEMENT SOURCES, INC.  THE ATTACHED CHECK IS IN PAYMENT OF TEMS DESCRIBED BELOW. NOT CORRECT PLEASE NOTICY IN PROMISE NO RECEIPT OFFSHED.  DELUXE - FORM WV-3 V-2  DATE	RESOURCES, IN	Annual rental on Oil & Gas Lease dated March 1.1984 by and between Morris E. Nelson and Mountain Fuel Supply, later Mtn. Fuel Supply assigns and transfers to Mountain States Resources, Inc. on Sept.26, 1984 the following:  Township 33 South, Range 24 East, SLM.  Sec.6: Lots 6,7, E½SW¼, SW¼SE¼  Sec.7: Lot 1, NE½NW¼, NW½NE½ located in San Juan County, Utah.	
SOURCES, INC. FORM WV-3 V-2	RESOURCES, IN	Annual rental on Oil & Gas Lease dated March 1.1984 by and between Morris E. Nelson and Mountain Fuel Supply, later Mtn. Fuel Supply assigns and transfers to Mountain States Resources, Inc. on Sept.26, 1984 the following:  Township 33 South, Range 24 East, SLM.  Sec.6: Lots 6,7, E'2SW'2, SW'2SE'2  Sec.7: Lot 1, NE'2NW'2, NW'2NE'2 located in San Juan County, Utah.  310.42 acres\$1.00 per acre Rental	Ayeuni
SOURCES, INC. FORM WV-3 V-2	DATE Sept.16/85	Annual rental on Oil & Gas Lease dated March 1.1984 by and between Morris E. Nelson and Mountain Fuel Supply, later Mtn. Fuel Supply assigns and transfers to Mountain States Resources, Inc. on Sept.26, 1984 the following:  Township 33 South, Range 24 East, SLM.  Sec.6: Lots 6,7, E'2SW'2, SW'2SE'2  Sec.7: Lot 1, NE'2NW'2, NW'2NE'2 located in San Juan County, Utah.  310.42 acres\$1.00 per acre Rental	Ayeuni
PATE AND AND THE PATE OF THE P	DATE Sept.16/85	Annual rental on Oil & Gas Lease dated March 1.1984 by and between Morris E. Nelson and Mountain Fuel Supply, later Mtn. Fuel Supply assigns and transfers to Mountain States Resources, Inc. on Sept.26, 1984 the following: Township 33 South, Range 24 East, SLM. Sec.6: Lots 6,7, E-2SW-4, SW-4SE-4 Sec.7: Lot 1, NE-4NW-4, NW-4NE-2 located in San Juan County, Utah. 310.42 acres\$1.00 per acre Rental	Ayeuni
	DATE Sept.16/85  OUNTAIN STATES	DELUXE FORM-WV-3 VA  DESCRIPTION  Annual rental on Oil & Gas Lease dated March 1.1984 by and between Morris E. Nelson and Mountain Fuel Supply, later Mtn. Fuel Supply assigns and transfers to Mountain States Resources. Inc. on Sept.26, 1984 the following: Township 33 South, Range 24 East, SIM. Sec.6: Lots 6,7,E-SW4,SW4SE-4 Sec.7: Lot 1,NE-NW4,NW-NE-4 located in San Juan County, Utah. 310.42 acres\$1.00 per acre Rental.  Add a County Add County Add County	\$311.00 6. f

	DELUXE - FORM WV-3 V-2	12014
	DESCRIPTION	AMGUNT
Nov. 27/84	One year rental on Oil & Gas Lease - Morris E. Nelson - Vega Prospect - San Juan County, Utah - 11/4/84 - 11/4/85 (Nelson #6-11 Well)	\$310.42



MORRIS E. NELSON, Agent Auto- Life- Health- Home and Business



# DIVISION OF

P.O. Box 878 176 Blue Mountain Drive - Monticello, Utah 84535

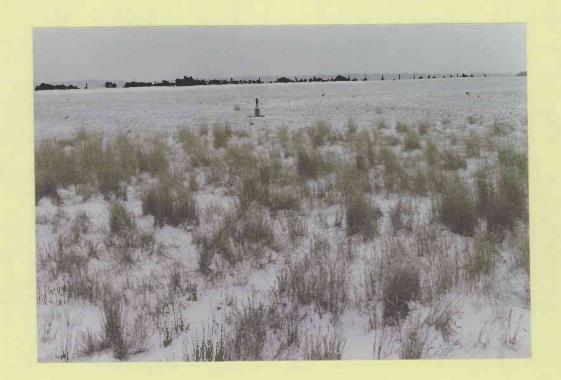
Phone: Off. 587-2521 Res. 587-2521 170 White Drive Salina, Hah 84654

hutaga Several days ago with you on the Nountain States Rea completing the their well only me I can I find the lease with Mountain D'dédretain a cospeja Stup where in in dicates on Maran 2 assigned to h Tes Resources."

were made to me. There may be a recording of the original lead in the Dan Duan Recorder tiles. Hut is needed, Il have research made and copy made of this in formallos. Please let me know what is meeded and Il dong best to locate the information. We have just moved from monticelly Our aproved Thave miss bladed of therown away things that I thought at the time that were ruff date -Relig again four Hours truly, Morris S. Welson

Mountain States Resources
Nelson #6-11
Sec.6-33S-24E, San Juan Co.
Jan. 7, 1987
API# 43-037-30554





#### Attachment I

## Individual Well Summary

Well Name:

Morris Nelson #6-11

API No.:

43-037-30554

Location:

2130' FSL 1820' FWL, NE/SW, Sec.6, T.33S,

R.24E, San Juan County, Utah

Initial Operator:

Worldwide Exploration Consultants, Inc.

Current Operator:

Mountain States Resources, Inc.

P.O. Box 176

Cutbank, Montana 59427

Lease No.:

Fee

Bond Status:

Blanket Bond #5056108, \$50,000, The Hartford Insurance Group

Current Well Status:

Shut-in Oil Well

Inspection History:

7-31-84:

Inspected by Pat deGruyter

1- 7-87:

Inspected by Glenn Goodwin & Carol Revelt

Correspondence History:

4-30-80

From Worldwide Exploration Consultants, Inc.; APD for Vega #1, for Paradox test,

proposed depth 5900'.

5-14-80

From Worldwide Exploration Consultants; Bond and Power of Attorney for Vega #1, Bond #146F3733, Travelers Indemnity Co.,

penal sum of \$10,000.

5-23-80

From DOGM; APD approved May 20, 1980,

assigned API NO. 43-37-30554.

9- 4-80

From Mountain States Resources, Inc.; APD with change of operator and well name to Mountain States Resources, Inc., Nelson

#6-11

11- 7-80

From DOGM; APD approval October 10, 1980

11-12-80

From Mountain States; acknowledge APD approval letter and inquiry if well is being carried in the name of Mountain

States Resources, Inc.

Page Two Attachment I

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2-17-81	From Mountain States; APD form with information stating that Nelson #6-11 was drilled to total depth of 6,155' depth reached on February 16, 1981, 5 1/2" production casing set to total depth.
2-19-81	From Mountain States; Final log on Nelson #6-11, included drill stem test reports and well logging reports.
6- 9-81	From DOGM; requesting monthly drilling reports for December 1980 to May 1981.
6- 9-81	From DOGM; requesting Well Completion Report and Log.
6-11-81	From Mountain States; acknowledge DOGM letter and enclosed daily drilling summary September 22, 1980 to February 16, 1981.
6-11-81	From Mountain States; acknowledge DOGM letter and stated they are in the process of completing said well, waiting on lease equipment, completion report will be field after equipment installed, well is completed and on production.
2- 3-82	From DOGM; requesting Well Completion Report and Log.
4- 5-82	From DOGM; requesting Well Completion Report and Log within 14 days or file will be turned over to DOGM Attorney for legal action.
4-23-82	From DOGM Attorney; if information on all activities and production not received by May 3, 1982, a Board hearing will be scheduled and request a moratorium on your future drilling application and operations.
4-30-82	From DOGM Attorney; Mountain States Operations Manager in Canada, time extension granted, well not completed, anticipate completion summer, 1982.
9-28-82	From DOGM; Nelson #6-11 inspected by staff September 3, 1982, well producing on pump, request Well Completion Report.

Page Three Attachment I

10-13-82	From Mountain States; attempting to evaluate well results, initial production 41 BOPD and 10 BWPD, rapid decline to 5 bbl oil per week. Information included formations and intervals, perforations, acid treatments, and production.
12-20-82	From Mountain States; Well Completion Report, well shut-in as of December 1, 1982 and will be until spring, 1983.
6-13-84	From Mountain States; Sundry Notice, propose to plug and abandon, Approved June 19, 1984.
12-15-84	From Mountain States; enclosed Report of Operations and Well Status Report for November 1984. (Report not in file)
8- 5-85	Inspection report; shut-in oil well, no well sign, reserve pit not fenced, gas leak from wellhead.
9-23-86	From DOGM; Mr. Morris Nelson requests well be plugged and abandoned, sundry notice from Mountain States proposed to plug and abandon approved June 19, 1984, DOGM requests plan to resolve matter within 15 days.
9-26-86	From Hartford Insurance; request number of permits covered by blanket bond #5056108, Hartford not willing to accept additional liability under captioned bond effective December 20, 1986.
10-17-86	From DOGM; blanket bond #5056108 covers three wells, Morris Nelson #6-11, Edris Calvert #1, and Redd #11-1, additional liability limited to above wells.
11-10-86	From Mr. Morris Nelson; requests help in requiring Mountain States to properly plug and abandon well.
1- 7-87	Inspection Report; shut-in oil well, no well sign, reserve pit has been filled, deadmen anchors not removed.

Page Four Attachment I

### Problem Summary:

Morris Nelson #6-11, spudded September 22, 1980 with dry hole spudder and had drilled 2,720' prior to APD approval on October 10, 1980, reached total depth February 16, 1981. Well has been shut-in since December 1, 1982. Mountain States has failed to submit Monthly Drilling Reports, Well Completion Reports, and Log. A daily drilling summary was supplied after one request. The Well Completion Report and Log was supplied after five requests and the threat of legal action. The well site has no well sign, reserve pit not fenced, and has gas leak at wellhead.

#### Recommended Action:

Mountain States, Sundry Notices dated June 13, 1984 stated this well has not attained commercial production and proposed to plug and abandon. It is recommended the Morris Nelson #6-11 be properly plugged and abandoned, and the location be reclaimed.

# Division of Oil, Gas and Mining PHONE CONVERSATION DOCUMENTATION FORM

[]	Well File [] Suspense	her
1.	. Date of Phone Call: 12/20/89 Time: 9 4 till 10 4	
2.	Talked to: (Initiated	l Call [1)
	Name ToE Mole / Van (Initiated Call []) - Phone No. (40) of (Company/Organization) Mountain Startes	6)973-2235
	43-037-30972	ian + Garage
3.	Redd 11-1 5-11 335 23 & 43-037-30697 Sign	17 12 1 6 4 cay 2
	morris nelson 6-11 5-6-335-248 5.90	
4.	4. Highlights of Conversation: gave 30 days For Signs & Pu under Gauge on Calvert#1  He told me that Redd 11-1 & melson 6-11  & was given to Land owners the Lan  wanted to Leave Well heads on. He sa  Is on monthly reports he sends in.	are PyPo



## **MOUNTAIN STATES RESOURCES, INC.**

A Subsidiary of MSR Exploration Ltd.

OIL & GAS EXPLORATION & PRODUCTION

O P E R A T I N G I N T H E R O C K Y M O U N T A I N S

CBM Building - Box 250 - Cut Bank, Montana 59427-0250 - (406) 873-2235

December 20, 1989

- 0

J/J

State of Utah Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, UT 84180-1203

RE: Annual Reports of Shut-In Wells
M.S.R. Federal 25-1X, Morris Nelson 6-11, Redd Investment 11-1,
and Edris Calvert No. 1 - San Juan County, Utah

#### Gentlemen:

Reference your letter of December 1, 1989 to Utah oil and gas well operators regarding annual well status reports.

Please find enclosed a Form 9 for each of the above captioned wells, reporting their status as shut-in oil or gas wells.

Trusting you will find everything in order, I remain

Yours very truly,

MOUNTAIN STATES RESOURCES, INC.

J. V. Montalban - President

Manager of Operations

JVM/rr

Enclosures

cc: BLM - Moab BLM - SLC

# STATE OF UTAH DIVISION OF OIL, GAS AND MINING

			5. LEASE DESIG	Ination & Serial No.
			Fee	
(Do not use this form for prop	FICES AND REPORTS osals to drill or to deepen or plug! ICATION FOR PERMIT—" for su	back to a different reserv	İ	LLOTTEE OR TRIBE NAME
	ICATION FOR PERMIT— 10F SU	en proposals.)	7. UNIT AGREE	MENT NAME
WELL X GAS OTHER	<u> </u>	<b>500000</b>	production of the state of the	
. NAME OF OPERATOR		))  <b>5</b> (5,2,1)*	8. FARM OR LE	ASE NAME
MOUNTAIN STATES RESOU	RCES, INC.		Morris	Nelson
. ADDRESS OF OPERATOR	į.	JAN 12 19	J M9. WELL NO.	110 130 11
P.O. Box 250 - Cut Ba: LOCATION OF WELL (Report location cie	nk, Montana 59427	<b>9</b>	1 6-11	
See also space 17 below.)	L & 2130° FSL, Sec.	The street will be a street of the street	-	POOL, OR WILDCAT
At proposed prod. zone		U. C.		M., OR BLK, AND EY OR AREA
4. API NO.	15. ELEVATIONS (Show whether I	OF RT GR etc.)	Sec. 6,	T33S, R24E, S.L
	1			
42-037-30554	6915' GI		San Jua	n   Utah
	Appropriate Box To Indicate I	Nature of Notice, Rep	ort or Other Data	
NOTICE OF INTE	NTION TO:	1	Subsequent report of	•
TEST WATER SHUT-OFF	ULL OR ALTER CASING	WATER SHUT-OFF	REF	AIRING WELL
FRACTURE TREAT	ULTIPLE COMPLETE	FRACTURE TREA	·	ERING CASING
SHOOT OR ACIDIZE	BANDON	SHOOTING OR AC	- Commont	*TRAMZOOK
· · · · · · · · · · · · · · · · · · ·	HANGE PLANS	(Other)		
(Other) Annual Status	Report	Completio	ort results of multiple compon or Recompletion Report	letion on Well and Log form.)
APPROX. DATE WORK WILL START	•	DATE OF COMPL		
Mountain States Resorto continue shut-in marginal well regula oil prices. All equ	status for the well. tions and it continu	or of the Morri The well is les to be uneco	shut-in under st pnomical to produ	requests approval ripper and ace at current
- · · · · · · · · · · · · · · · · · · ·	-			
		ę com		<b>9</b> .
		,	OIL AND GAS	
			DRN RJF	
				-
		<u> </u>	JRB V GLH	-
	•		DTS SLS	
		<u>_</u>		
			1.TAC \	X
	1	ļ.	Z MCDOSIM /	<b>-</b> :
18. I hereby certify that the the joing i	s to and to fee:		MICROFILM /	
SIGNAL TO THE	TITLE	President	4- FILE DATE	December 20, 1989
V. Montal	pan	Ε,	- La La La La La La La La La La La La La	
(Phis space for Federal or State off.	ice use)			
APPROVED BY	TITLE		DATE _	
CONDITIONS OF APPROVAL, IF	ANY:			

## STATE OF UTAH ION OF OIL, GAS AND MINING

# MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

JAN + 8- 1994 PATRICK M MONTALBAN MOUNTAIN STATES RES INC DIVISIONS OF PO BOX 250 OIL, GAS & MINING CUT BANK MT 59427

T 777 . T F		
UIAH	ACCOUNT	NUMBER:

N2610

REPORT PERIOD (MONTH/YEAR)

11 / 93

AMENDED REPORT (Highlight Changes)

Well Name API Number Entity Location	Producing	Well	Days	Production Volumes		
	Zone	Status	Oper	OIL(BBL)	. GAS(MCF)	WATER(BBL)
MORRIS NELSON 6-11 4303730554 09950 33S 24E 6 REDD #11-1	PRDX	sow	0	0	0	0
4303730697 09955 33S 23E 11 EDRIS CALVERT #1	ISMY	SOW	0	0	0	0
4303730972 09956 34S 25E 35	HRMS	SGW	0	0	0	0
·						
		7	TOTALS	0	0	0

COMMENTS: Morris Nelson #6-11 is shut-in, all equipment remove and location backfilled and leveled. Redd #11-1 is shut-in, all equipment removed and location backfilled and leveled.

is shut-in, gas well pending market outlet.

I hereby certify that this report the best of my knowledge.

Date: December 28, 1993

Name and Signature:

Montalban - Mgr. of Operations

Telephone Number: (406) 873-2235

Edris Calvert

DETAIL WELL DATA menu: opt 00 03/29/94 4303730554 prod zone: PRDX sec twnshp range qr-qr api num: 9950 : MORRIS NELSON 6-11 6 33.0 S 24.0 E entity:

well name: MORRIS NELSON 6-11

operator: N2610: MOUNTAIN STATES RES INC meridian: S

field: 1 : WILDCAT

confidential flag: confidential expires: alt addr flag:

\* \* \* application to drill, deepen, or plug back \* \* \*

lease number: FEE lease type: 4 well type: OW

surface loc: 2130 FSL 1820 FWL unit name:

prod zone loc: 2130 FSL 1820 FWL depth: 6000 proposed zone: PRDX

elevation: 6151' KB apd date: 800523 auth code: C-3

\* \* completion information \* \* date recd: la/pa date:

spud date: 810120 compl date: 810916 total depth: 6155'

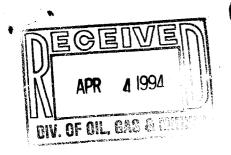
producing intervals: 6125-6140',5690-5905'

bottom hole: 2130 FSL 1820 FWL first prod: 820915 well status: SOW 24hr oil: 41 24hr gas: 24hr water: 5 gas/oil ratio:

24hr oil: 41 24hr gas: 24hr water: 5 gas/oil ration \*\* well comments: api gravity:

850228 ENTITY ADDED:800904 OPER FR WORLDWIDE EXPLOR:

opt: 21 api: 4303730554 zone: date(yymm): enty acct:



170 North White Drive Salina, Utah 84654 March 31, 1994

State of Utah
Department of Oil, Gasand Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180

Dear Mr. Mathews,

In pursuant to our conversation in your office on March 29, 1994, concerning the obligation of plugging the abandoned well known as the Morris Nelson No. 6-11, (Township 33 So. R24 E. SLM., Sec 6: Lots 6,7,  $E_2^{\dagger}SW_2^{\dagger}$ , containing 310.42 ac. including well sight Morris Nelson No. 1 well in NESW Sec. 6 San Juan Cty.). I am requesting your office to assist in getting Mountain States Resources, Inc., to carry out their obligation of releasing the well sight back to the owner after the well has been properly plugged as the State of Utah statutes require. Please note the well sight has not been released from Mountain States Resources. Why? I do not know.

There is new interest in the property, but the involved leasees want the well plugged as an abandoned well before closing their agreement.

I have contacted Mr. Montablan of Mountain States Resources who drilled the well at Box 1995, Cut Bank, Montana 59427-1995 (406-873-2235) several times but he uses excuses for not plugging the well.

I do hope your office can be of help in solving the problem.

Sincerely,

Morris Nelson

CERTIFIED 219 870 959 USA RETURN RECEIPT PM REQUESTED

SIAIL OF U.MI

## Plugging & Abandonment Procedure Morris Nelson #6-11

2130' FSL & 1820' FWL Sec. 6 – T33S – R24E NE ¼ / SW ¼ San Juan County, Utah

- 1. Set Cast Iron Bridge Plug (CIBP) at 5,750'. Place 17 sacks of cement (minimum yield 1.2 cu. ft per sack) on top of CIBP.
- 2. RIH with tubing and tag plug. Top of plug must be no lower than 5,650'.
- 3. Circulate hole. Spot 25 sacks of cement (minimum yield 1.2 cu ft. per sack) from 2286' to 2186'.
- 4. Perforate 5-1/2" casing at 100'.
- 5. Place 35 total sacks of cement (minimum yield 1.2 cu ft. per sack) in the 5-1/2" casing and in the 8-5/8" X 5-1/2" annulus.
- 6. The wellhead will be removed and a "dry-hole" plate will be installed.

OCT 46	799 <b>0</b> 3:5	34PM MERCURY-	-CASPER	P.2
			MERCURY	Y EXPLORATION
•			7	
WELL NAME:				SPUD DATE: 01/20/81
LOCATION:	2130' FSL &			RIG REL: 02/15/81
SEC/TWP/RNG	6	338	24E	COMP DATE: September 1981
COUNTY, ST:	San Juan, Ut	ap		FIELD: Wildcat
WELL TYPE:	Oil	<del>-</del>		FORMATION: Desert Creek & Ismay
MERCURY WI:	100%	THEFT	To and the same	Initial Pr : N/A
110	BOPD 41	BWPD	MCFD	Moddie Mei Com #e 44
IP	41	5	tstm	MORRIS NELSON #6-11
SURFACE CASI	NG DESIGN			SI   1 BG
8-5/8"	MINICAL E.			
2236'	-	24 #/FT		
				8-5/8" Surface Casing
SET @	2236' KB			8-5/8" Surface Casing
CEMENT W/	750 SXS			_
TAILED W/				
			J	
PROD CASING	DESIGN			
5 1/2"	_			
6155'		15.5 #/ft		
***				
SET @	6155' KB			
CEMENT W/	150 SXS	_		
CEMENT TOP @				No. 25
DETER, BY	CALCULAT	ED		*
22,134, 21	CHLCOLAI		}	N 63
PROD LINER DI	esign			TOC - 5285' (CALC.)
NONE	,			100-5205 (ORDO.)
	-		'	
SET @				
CEMENT W/				
CEMENT TOP @			1	
DETER. BY				i i i i i i i i i i i i i i i i i i i
		<del></del>		
PERF. DATA:	SPF	FORM,		
6125'-6140	4	Desert Cr.		
5900-5905	4	Lower Ismay		Desert Creek & Ismay Perfs
5760-5780	3	Upper Ismay		5760' - 6140' (gross)
				5-1/2" Casing @ 6,155'
TUBING DATA				5-1/2" Casing @ 6,155'
2-3/8"		?	İ	
#-VIU			Į	
				ACID JOB: Acidize with 4,500 gallons 28% HCL
set @				in three separate jobs.
PACKER TYPE	?	_		
S.N ID / @				
TBG ANCH. @				
_				FRAC JOB: NONE
API#	43-037-3055	4		
	:			
Prepared By:	Ken Hendrick			- Annual Control of the Control of t
Date :	September 27	, 1999 		

#### FORM9

STATEOFUTAH DEPARTMENTOFNATURALRESOURCES

DIVISIONOFOIL,GASANDMINING	5.LEASEDESIGNATIONANDSERIALNUMBER: Fee
SUNDRYNOTICESANDREPORTSONWEL	S 6.IFINDIAN,ALLOTTEEORTRIBENAME:
Donotusethisformforproposalstodrillnewwells, significantly deepenexisting well she low current bottom-hole depth, drillhorizontal laterals. Use APPLICATION FOR PERMITTO DRILL form for such proposal	reenterpluggedwells,orto 7.UNITorCAAGREEMENTNAME:
1.TYPEOFWELL OILWELL GASWELL OTHER	8.WELLNAMEandNUMBER:
2:NAMEOFOPERATOR:	Morris Nelson #6-11
Mercury Exploration Company 3 ADDRESSOFOPERATOR:	43-037-30554
PO Box 1970 CITY Casper STATE WY ZIP 82602	PHONENUMBER: 10.FIELDANDPOOL,ORWILDCAT: Wildcat
4.LOCATIONOFWELL	
FOOTAGESATSURFACE: 2130' FSL & 1820' FWL	COUNTY: San Juan 42 1
QTR/QTR,SECTION,TOWNSHIP,RANGE,MERIDIAN: NESW 6 33S 24E	STATE: UTAH
11. CHECKAPPROPRIATEBOXESTOINDICATENATURE	FNOTICE, REPORT, OROTHERDATA
TYPEOFSUBMISSION	TYPEOFACTION
NOTICEOFINTENT DEEPI	
	URETREAT SIDETRACKTOREPAIRWELL
	ONSTRUCTION TEMPORARILYABANDON
	TORCHANGE TUBINGREPAIR
	NDABANDON VENTORFLARE
(SubmitOriginalFormOnly)	
Dateofworkcompletion:	MATIONOFWELLSITE WATERSHUT-OFF
6/28/2000 1= =	MATIONOFWELLSITE OTHER:  IPLETE-DIFFERENTFORMATION
12. DESCRIBEPROPOSEDORCOMPLETEDOPERATIONS.Clearlyshowallpertinent details inclu The plugging and abandonment of the Morris Nelson #6-11 commer Division of OG&M was notified on 6/27/00. The plugging details are also attached.	ced on 6/26/00 and was completed on 6/28/00. The
MI & RU A-Plus Well Service.	
Circulate the hole with water. Run a bit and a 5-1/2" casing scraper	o 5730'. Set a 5-1/2" cement retainer at 5730'. Spot a 17
sack cement plug from 5730' to 5580'.  Spot a 25 sack cement plug from 2302' to 2081'.	
Perforated 3 squeeze holes at 100'. Establish circulation with 25 bbl	of water. Pump 43 sacks cement down the 5-1/2" casing
	3
Cut off wellhead and cement at surface with 8 sacks. Install P&A pla	to and DD
out on wellinead and certient at surface with a sacks. Install P&A pla	e and RD.
$\Phi_{i} = \frac{1}{2} \left( \frac{1}{2} \right) \right) \right) \right) \right)}{1} \right) \right)}{1} \right)} \right)} \right)} \right)} \right)} \right) \right)}} \right) } \right) }$	
NAME(PLEASEPRINT) Ken Hendricks	пптье Regional Operations Manager
SIGNATURE Am Almai	DATE 7/24/2000

RECEIVED

JUL 2 6 2000

#### **INSTRUCTIONS**

### Thisformshallbesubmittedbytheoperatortoshowtheintentionand/orcompletionofthefollowing:

- ! miscellaneousworkprojectsandactionsforwhichotherspecificreportformsdonotexist;
- ! allotherworkandeventsasidentifiedinsection11,TypeofAction,orasrequiredbytheUtahOilandGas ConservationGeneralRules,including:
  - -minordeepeningofanexistingwellbore,
  - -pluggingbackawell,
  - -recompletingtoadifferentproducingformationwithinanexistingwellbore(intentonly),
  - -reperforatingthecurrentproducingformation,
  - -drillingasidetracktorepairawell,
  - -reportingmonthlythestatusofeachdrillingwell.

#### **Thisformisnottobeusedfor**

#### proposalsto

- -drillnewwells.
- -reenterpreviouslypluggedandabandonedwells,
- -significantlydeepenexistingwellsbelowtheircurrentbottom-holedepth,
- -drillhorizontallateralsfromanexistingwellbore,
- -drillhydrocarbonexploratoryholessuchascoresamplesandstratigraphictests.

UseForm3, Application for Permitto Drill (APD) for such proposals.

NOTICEOFINTENT-Anoticeofintentiontodoworkonawellortochangeplanspreviouslyapprovedshallbe submittedinduplicateandmustbereceivedandapprovedbythedivisionbeforetheworkiscommenced, The operatorisresponsibleforreceiptofthenoticebythedivisioninampletimeforproperconsiderationandaction. Incasesofemergency, the operatormay obtainverbal approval to commence work. Withinfived a ysafterreceiving verbal approval, the operator shall submit a Sundry Notice describing the work and acknowledging the verbal approval.

SUBSEQUENTREPORT-Asubsequentreportshall besubmitted to the division within 30 days of the completion of the outlined work. Specific details of the work performed should be provided, including dates, well depths, placement of plugs, etc.

WELLABANDONMENT-Proposalstoabandonawellandsubsequentreportsofabandonmentshouldinclude reasons for the abandonment; data on any former or present productive zones, or other zones with present significantfluidcontentsnotsealedoffbycementorotherwise; depths (topandbottom) and methodofplacement of cementplugs; mudorothermaterial place doelow, between an dabove plugs; amount, size, and methodofparting of any casing, finer, or tubing pulled and the depth totopof any left in the hole; methodof closing topof well; and date wells it econditioned for final inspection looking to approval of the abandonment.

InadditiontoanySundryNoticeformssubmitted, mustbesubmittedtothedivisiontoreportthe results of the following operations:

- ! completingorplugginganewwell,
- ! reenteringapreviouslypluggedandabandonedwell.
- ! significantlydeepeninganexistingwellborebelowthecurrentbottom-holedepth,
- ! drillinghorizontallateralsfromanexistingwellbore,
- ! drillinghydrocarbonexploratoryholessuchascoresamplesandstratigraphictests,
- ! recompletingtoadifferentproducingformation.

#### Sendto:

UtahDivisionofOil,GasandMining 1594WestNorthTemple,Suite1210 Box145801 SaltLakeCity,Utah84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

**RECEIVED** 

JUL 2 6 2000

DIVISION OF OIL, GAS AND MINING

(5/2000)

## P.O. BOX 1979 FARMINGTON, NM 87499 505-325-2627 • FAX: 505-325-1211

June 29, 2000

Mercury Exploration Company
Morris Nelson #6-11
Unit K, NE, SW Section 6, T-33-S, R-24-E
San Juan County, UT
Fee, API #43-037-30445

Page 1 of 1

Plug & Abandonment Report

#### **Cementing Summary:**

Plug #1 with retainer at 5730', spot 17 sxs Class B cement inside casing up to 5580' to isolate Ismay interval and to cover Desert Creek top.

Plug #2 with 25 sxs Class B cement inside casing from 2302' to 2081' to cover 8-5/8" casing shoe and Culter top.

Plug #3 with 43 sxs Class B cement pumped down the 5-1/2" casing from 100' to surface, circulate 1 bbl good cement out bradenhead.

#### **Plugging Summary:**

Notified Utah Division of O, G&M on 6/27/00

- Safety Meeting. RU rig and equipment; layout relief line to pit. Open up well and start to blow down 350# tubing pressure and 400# casing pressure; yellowish oil flowing. Shut in well and line pit. Attempt to pump down tubing, pumped 3 to 4 bbls and started circulating clean water. Attempt to pump down casing with tubing shut in; pumped 20 bbls water and pressured up to 1000#. Blow down tubing and casing slowly to contain oil in lined pit. Pump additional 60 bbls water down casing to kill well. ND wellhead and LD single joint tubing. NU BOP and test. Dig out wellhead and install new 2" valve. PU and TIH with 125 joints 2-3/8" tubing with 5-1/2" casing scraper and 4-3/4" bit. Shut in well and SDFD.
- Safety Meeting. Open up well and blow down 30# casing pressure and 10# tubing pressure. Continue to TIH with bit and tubing to 5730'. TOH and LD BHA. TIH and set 5-1/2" DHS cement retainer at 5730'. Pressure test tubing to 1000#, held OK. Sting out of retainer and pressure test casing to 500#, held OK. Plug #1 with retainer at 5730', spot 17 sxs Class B cement inside casing up to 5580' to isolate Ismay interval and to cover Desert Creek top. PUH to 2302'. SI well & SDFD.
- 6-28: Safety Meeting. Open up well, no pressure. Plug #2 with 25 sxs Class B cement inside casing from 2302' to 2081' to cover 8-5/8" casing shoe and Culter top. TOH with tubing. RU A-Plus wireline truck. Perforate 3 HSC squeeze holes at 100'. Establish circulation out bradenhead with 25 bbls water. Plug #3 with 43 sxs Class B cement pumped down the 5-1/2" casing from 100' to surface, circulate 1 bbl good cement out bradenhead. Shut in well and WOC. RD floor and ND BOP. Dig out wellhead; found cement down 10' in 5-1/2" casing and down 8' in 8-5/8" casing. Mix 8 sxs Class B cement and install P&A plate marker. RD and MOL.



ATTORNEYS AT LAW

WHITNEY L. CARDWELL
DIRECT DIAL 817-877-2804
E-MAIL wcardwell@canteyhanger.com

801 CHERRY STREET \* SUITE 2100 FORT WORTH, TEXAS 76102-6821 817-877-2800 \* METRO 817-429-3815 FAX 817-877-2807

March 13, 2001

43.037.30554

#### VIA FEDERAL EXPRESS

Mr. Al McKee Utah Division of Oil, Gas & Mining 1594 West North Temple, Suite 1210 Box 145801 Salt Lake City, Utah 84114-5801

Re: Mercury Exploration Company

Dear Mr. McKee:

As per our conversation yesterday, attached are the following Sundry Notices and Reports on Wells:

- 1. Redd Investment Corp. #11-1;
- 2. Morris Nelson #6-11; and
- 3. Edris Calvert #1.

Ken Hendricks, Regional Operations Manager of Mercury Exploration Company, submitted the above referenced reports to Bob Krueger at the Utah Division of Oil, Gas & Mining in July 2000. We need to determine the filing date of these notices because the Utah State Tax Commission is sending 2001 Annual Returns and 2001 Returns of Assessment concerning these three wells. These reports are being generated because the Tax Commission's records indicate that the wells have not been plugged and abandoned. However, all of these wells were plugged by July 6, 2000.

Thank you for your assistance. Please contact me if you have any questions.

Sincerely,

Whitney L. Cardwell

Thitney of 6 an dwell

MAR 1 4 2001

DIVISION OF OIL, GAS AND MINING

**Enclosures** 

Mr. Al McKee March 13, 2001 Page 2

cc:

Dean A. Tetirick - Firm (w/o encl)
Barbara Turley - Quicksilver (w/o encl)

1:\LGL\WCARDWEL\Quicksilver\Letters\2001\utah.oil-gas.wpd

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MAR 12 /01 10:	ZRAM MIRY DRY-CHSPER				FORM3
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TYPEOFWELL OILWELL	GASWELL OTHER				037-30554
Named Poperation Company Reployation Company	inna Ol	2603	PHONENUMBER: (307) 234-1563	10.FIELD Wildo	ANDROOL, DRIVILLICA .
	Cheper STATE WY 218 8			COUNTY	San Juan
MANUFACTURE DANGE N	MERWER 1335 24	三班 漢族		STATE	UTAH
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The plugging and abandon Division of OG&M was n	convertwelltype  MPLETEBOPERATIONS.Clearlystumolipatine  comment of the Morris Nelson #6-1  otified on 6/27/00. The plugging d	entdetallsinclud	ingdates,depths,volumes,et	2.	npleted on 6/28/00. The summary of the procedure i
Spot a 25 sack coment plug from a 25 sack coment perforated 3 squeeze his	bles at 100'. Establish circulation \	with 25 bbl	s, of water. Pump 45	" cemeni 3 sacka (	t retainer at 5730'. Spot a 1' coment down the 5-1/2" cas
Cut off wellhead and ce	ment at surface with 8 sacks. Inst	ali P&A pis	te and RD.		
	•				
	1 *		Regional Op	erations	Manager

MAR 1 4 2001

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DIVISION OF OIL, GAS AND MINING

(5/2000)

NAME(PLEASEPRINT)

DATE 7/24/2000

## INSTRUCTIONS

Thisformshallbesubmittedbytheoperatortushowtheintentionand/orcompletionofthefollowing:

- miscallaneousworkprojectsandactionsforwhichotherspecificroportiormsdonatexist;
- allotherworkandeventsasidentifiedinacotion11, TypeofAction, orasrequired by the Utah Oiland Gas
  - ConservationGeneralRulos,including:
    - -minordespeningofanexistingwellbore,
    - -recompletingtoadifferentproducingformationwithinanexistingwellbore(intentonly),
    - -reperforatingthecurrentproducingformation,
    - -drillingasidetracktorepairawell,
    - -reportingmonthlythestatusofeachdrillingwell.

## Thisformisnottobeusedfor

## proposalsto

- -drilinewwells.
- -reenterpreviouslypluggedandabandonedwells, -significantlydeepanexistingwellabelowtheircurrentbottom-holedepth,
- -drillhorizontallateralsfromanexistingwellbore,
- -drillhydrocarbonexploratoryholessuchascoresamplesandsmattgraphictests,

UseForm3,ApplicationforPermittoDrill(APD)forsuchproposals.

NOTICEOFINTENT-Anoliceofintentiontodoworkonawellortochangoplanspreviouslyapprovedshallbe submitted induplicate and must be received and approved by the division before the work is commenced. The operatorisresponsible for receipt of the notice by the division in ampletime for proper consideration and action. Incasesofemergency, the operatornay obtainer balapproval ocommence work. Withinfived eyes frame celving verbal approval, the operator shall submit a Sundry Notice describing the work and acknowledging the verbal

SUBSEQUENTREPORT-Asubsequentreportshallbesubmittedtothedivisionwithin30dayeofthecomplation of the outlined work. Specific details of the work performed should be provided, including dates, well depths, placementofplugs,etc.

WELLABANDONMENT-Proposalstoabandonawallandsubsequentreportsofabandonmentehouldinclude reasons for the abandonment; data on any former or present productive zones, or other zones with present significantiluidcontentanotaealedoffbycementorotherwise;depths(topandbottom)andmethodofplacement of emanplugation of the material placed below between and above plugation of the material placed by the material p ofanycasing liner, ortubing pulled and the depth to topofanyleftinine note; methodofclening topofwell; and datewellsiteconditionedforfinalinspectionlookingtoapprovalofthcabandonment.

InadditiontoanySundryNoticeformssubmitted, musthesubmittedtothedivisiontoreportthe

Forms, Well Completion or Recompletion Reportand Log results of the following operations:

- completingorplugginganewwell,
- reenteringspreviouslypluggedandabandonedwell,
- significantly deepening an existing well bore below the current bottom-hole depth,
- drillinghorizontaliateralsfromanexistingwellbore.
- drillinghydrocarbonexploratoryholessuchascoresamplesandelratigraphictests,
- racompletingtoadifferentproducingformation.

#### Sendlo:

UtohDivisionofOil,GasandMining 1594WestNorthTemple,Suite1210 Box145601 SaliLakeCity, Litah94114-5801

Phone: 601-539-5340

8D1-359-3940 Fax:

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**DIVISION OF** OIL, GAS AND MINING

(SIZ000)

P.8

A - PLUS WELL SERVICE, INC.

P.O. BOX 1979 FARMINGTON, NM 81499 505-325-2627 • FAX; 505-325-1211

June 29, 2000

Mercury Exploration Company Morris Nelson #6-11 Unit K, NE, SW Section 6, T-33-S, R-24-E San Juan County, UT Fee, API #43-037-30445

Page 1 of 1

Plug & Abandonment Report

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## Plugging Summary:

6-28

Notified Utah Division of O. G&M on 6/27/00

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Safety Meeting. Open derwell and blow down states sing pressure and 10# tubing pressure. Continue to 101 with bit and to 100 to 6-27

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MAR 1 4 2001

DIVISION OF OIL, GAS AND MINING